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Volume Three: Indonesia Project

Cycle I of the Global Experiment

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POND DYNAMICS/AQUACULTURE COLLABORATIVE RESEARCH DATA REPORTS

Volume Three. Indonesia: Cycle 1 of The Global Experiment

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ABSTRACT

Data for various physical, chemical and biological parameters were collected in 1983-84 at the Babakan Fisheries Station of the Institute Pertanian Bogor, Indonesia during the first experimental cycle of the Pond Dynamics/Aquaculture Collaborative Research Support Program (PD/A CRSP). The station is located 6.6°S, 106.1°E and is at 220 m above mean sea level. Climatic conditions lacked seasonal attributes and showed little variation over an annual cycle. Mean air temperature was 27.3°C, rainfall 1.3 cm/day, evaporation 0.35 cm/day, and wind speed 0.8 m/sec. Clouds and water vapor limited light at ground level. Means between 29 and 30 moles of 400-700 nm photons/m^2/day were reported during these first cycle experiments.

The station and drainage basin are characeterized by highly leached and permeable volcanic soils. Ponds are susceptible to high rates of water loss due to seepage. Surface water used for pond culture had low total alkalinity (21 mg $CaCO_3$/l). Algal productivity was low in ponds (0.8 g C/m^2/day). Excursions in vertical distribution of dissolved oxygen during 24-hour periods had small amplitudes leaving ponds well oxygenated at all times, and substantiating low rates of algal productivity and suggesting little detrital metabolism. However, amounts of phosphorus, nitrogen, and photosynthetically active radiation were adequate for potentially greater algal production. When alkalinity was raised to 37 mg $CaCO_3$/l, algal productivity increased (1.2 g C/m^2/day). This indicated that algal productivity was limited by the availability of inorganic carbon. Under these conditions, Nile tilapia (Oreochromis niloticus) yield was poor: approximately 600 kg/ha for grow-out periods of about 145 days. Concentrations of un-ionized ammonia were too low to substantially retard fish growth. These baseline data were used to design experiments for higher fish yield using lime with fertilizers in the second year of CRSP experiments.

INTRODUCTION

The island of Java is part of the Indonesian archipelago that stretches 5,600 km from east to west on the southwest rim of the Pacific basin. The backbone of Java consists of 25 major volcanic peaks that rise between 1900 and 3700 m above mean sea level. The volcanos and intervening land constitute a chain approximately 940 km long between latitudes 6.0 and 8.5°S. The 110th meridian east of Greenwich bisects the island. Java's volcanos were formed by the upward extrusion of materials due to plate tectonic activity associated with the Java trench in the Indian Ocean south of the island. The peaks continue to grow by lava flows and upheavel of ash. From time-to-time they erupt violently, spewing boulders and ash. Among the volcanic peaks are low-elevation ridges of limestone. These are uplifted coral reefs largely of miocene origin (Subardja and Buurman 1980). The distribution of soils that developed from materials of volcanic and coral reef origin is of great significance for aquaculture. Work of Soetjipta et al. (1984) in Java shows that groundwater and runoff from volcanic regions of high rainfall can be expected to be low in minerals, while mineral concentrations can be eight to ten times greater in drainage from limestone regions. Bhukaswan (1980) summarized information on the dependency of high fish yield on adequate mineral concentrations in waters of Southeast Asia. It is important to know the distribution of mineral-poor and mineral-rich fresh waters in Java as baseline information for pond management. However, this sort of information does not exist (personal communication, Central Research Institute for Fisheries, Jakarta).

Rainfall on volcanic peaks and surrounding uplands on Java is high: greater than 3 m per year along the mountain chain and as much as 7.5 m per year in parts of Central Java (Figure

1). Runoff from the uplands is distributed throughout the countryside by networks of irrigation canals. Because of high rainfall and well-developed systems for distribution of runoff, water for pond aquaculture is plentiful. This is particularly true in West Java where typically distinct wet and dry seasons do not occur as they do in eastern portions of the island (Fontanel and Chantefort 1978). With abundant annual rainfall and well-developed water distribution systems, West Java has the most fish ponds in the Indonesian archipelago (Poernomo 1976). The majority of these are subsistence ponds in which production is low (1500 kg/ha/yr) and tends to be inconsistent (Pownall 1975).

In 1982, the Pond Dynamics/Aquaculture Collaborative Research Support Program (PD/A CRSP) was established by the U.S. Board for International Food and Agriculture Development (BIFAD) and the U.S. Agency for International Development (USAID). The goal of this program is to increase production of affordable fish protein in the tropics, and to improve the consistency of yields in the region. The PD/A CRSP carried out experiments that followed a common protocol at four freshwater sites in the tropics (see Volume 1 of PD/A Collaborative Research Data Reports by Egna et al. 1987). This paper reports results of work conducted in West Java during Cycle I (first year) of the PD/A CRSP. The purpose of Cycle I was to establish baseline data for subsequent CRSP experiments. The work was carried out at the Babakan Fisheries Station of Institut Pertanian Bogor (IPB) near Bogor, West Java (Figure 1). The station is at an elevation of 220 m above mean sea level near Mount Salak, a major volcanic peak in the island's chain. Population density in the drainage basin of the station is high: about 700 to 800 people/km^2. Land and water use are intensive with year-round rice cultivation dominating agriculture. Water used for pond culture at the Station emanated from a watershed characterized by leached volcanic soils (Subardja and Buurman 1980).

MATERIALS AND METHODS

Babakan Fisheries Station is a research facility used by staff and students in the Faculty of Fisheries at Institut Pertanian Bogor. The station has 40 aquaculture ponds. The ponds and two laboratory buildings were constructed as part of the initial site development in 1982-83. This study used 12 rectangular-shaped ponds, each having a surface area of 0.02 ha (10 x 20 m). The pond bottoms were soil; vertical sidewalls were made of field stone covered with cement. The ponds were filled and maintained at a depth of approximately 0.9 m by adding water from an irrigation canal at the perimeter of the site. It passed through a small, baffled settling tank prior to gravity discharge to the water distribution system that fed individual ponds. Inlets of ponds were covered with fine-mesh screen to prevent introduction of fish from the drainage system. Depth in each pond was regulated by a screened standpipe.

Two experiments were conducted during Cycle I of the CRSP to evaluate physical, chemical, and biological changes in aquaculture ponds treated with low nutrient inputs of phosphorus. A grow-out period of 142 days, from October 31, 1983 to March 21, 1984, was used in the first experiment. The second experiment had a grow-out period of 146 days, from June 19 to November 12, 1984. The same pond management procedures were used for both experiments. Data from one of the 12 CRSP ponds used in the second experiment were discarded due to human perturbation.

Ponds were drained prior to the start of experiments. A modification of the procedure of Shoemaker et al. (1961) developed for local soils in the Soils Department at IPB was used to determine lime requirements. Finely crushed agricultural limestone was spread on the bottoms of ponds in concentrations ranging from 2.0 to 4.5 mt/ha in Experiment 1, and from 0 to 1.1

mt/ha in Experiment 2. Ponds were filled with water the week after liming. Ponds were fertilized monthly with triple superphosphate (TSP at 46% P_2O_5). This was added by suspending the equivalent of 8 kg P_2O_5/ha in porous bags near the middle of ponds. Nile tilapia (Oreochromis niloticus) was stocked at all PD/A CRSP sites for Cycle I experiments. Fingerlings were sexed to obtain males, which were stocked in ponds at a rate of 1 fish/m^2 (200 fingerlings/pond) during the week after the first addition of TSP. Total stocking weight was obtained for each pond. At the end of the grow-out period, ponds were drained and fish harvested. Total weight was obtained for stocked fish, and survivors were counted to compare with numbers orginally stocked. Fingerlings were present in ponds at drawdown indicating that reproduction had occurred. Accurate weights of fingerlings were not obtained, but for Experiment 2 were estimated to be 1 kg/pond or less. Fish yield results reported later in this paper are for adult fish.

Analytical procedures and methods for obtaining measurements of climatic conditions and pond parameters were standardized for use in the tropics. Egna et al. (1987) have described PD/A CRSP methods in detail. Sampling techniques and analytical procedures that have special reference to interpretation of data in this paper are discussed below.

Incident light was recorded daily during grow-out periods at Babakan with a LI-COR quantum sensor coupled to a printing integrator. The instrument recorded flux density of photons in the 400- to 700-nm waveband of solar radiation: namely, photosynthetic photon flux density (PPFD). PPFD is given in this paper in units of moles of photons/m^2/day. One mole of photons is equivalent to one Einstein, a term sometimes used in the literature.

Full-sunlight PPFD was estimated for the Babakan region. This was done so that comparisons could be made between potential maximum light input and light input actually obtained with atmospheric conditions of haze and cloud cover that existed at the CRSP site. In this study, measurements were made throughout the year when the sun was unobstructed by clouds, and haze appeared to be minimal. McNabb et al. (in review) report results from 453 individual measurements made at elevations between 100 and 200 m above mean sea level in the Yogyakarta region in Central Java. Similar results were obtained for 64 additional measurements made at similar elevations (200 - 220 m) in the Bogor/Babakan region. The data from the two sites are combined in this paper.

LI-COR PPFD sensors were used to obtain these data. They were connected to LI-COR Model LI-188B integrating quantum meters. Measurements were made with sensors held horizontally. One-second, time-averaged integrations were recorded. The angle of elevation of the sun above the horizon was calculated for each measurement from:

$$\emptyset_h = \arcsin [(\sin \emptyset_l \times \sin \emptyset_d) + (\cos \emptyset_l \times \cos \emptyset_d \times \cos \emptyset_t)] \qquad (1)$$

where all angles are in degrees, $\emptyset_h$ is the sun's elevation above the horizon, $\emptyset_l$ the observer's latitude, $\emptyset_d$ the sun's declination on the day of measurement, and $\emptyset_t$ the hour angle of the sun where 1200 hr was 0° and each hour plus or minus 1200 hr was 15° (Payne 1977). PPFDs were then plotted as a function of angles of elevation using points at the upper limit of the data distribution to describe maximum observable full-sunlight. Results are shown in Figure 2 which indicate that Yogyakarta and Bogor are quite similar. However, the applicability of this data to lower elevations in Java awaits further study.

An annual curve for daily PPFD at Babakan was calculated by determining daily full-sunlight for various dates of the year. At this site there are two days with annual maxima and one day with an annual minimum. Maxima are for those days of the year when the sun is

directly overhead (90° above the horizon) and crosses the Babakan meridian; that is, at solar noon on March 4 and October 10. The sun is above the horizon for 12 hours on those days. Minimum daily PPFD occurs on the date of the southern hemisphere's winter solstice, on or about June 21. The annual curve was generated by calculating elevations of the sun above the horizon at 0.5 hr intervals for the maxima, minimum, and 10 other intermediate dates using Equation 1, assigning full-sunlight PPFD to each elevation from Figure 2, and then integrating the areas under the curves that resulted for each date. A line describing full-sunlight for days of the year was then drawn symmetrically through PPFD for selected dates to describe annual full-sunlight for the Babakan region. The area under the full-sunlight curve was integrated for the time intervals of Experiments 1 and 2. Daily PPFD was totaled for those intervals, and the percentage of full-sunlight incident on ponds during experiments was calculated.

Maximum and minimum air temperature, rainfall and windspeed were measured daily during experiments. Evaporation was measured daily during Experiment 2. Estimates of seepage losses from ponds were obtained on three dates during Experiment 1, and on four dates during Experiment 2. For seepage measurements, inlets and outlets of ponds were closed. Stage heights of ponds were recorded at the beginning and end of time intervals that varied from 10.5 to 12 hrs in length. Rainfall was measured for these intervals and subtracted from losses in stage height of ponds during intervals of measurement. The result was water loss for each pond due to seepage plus evaporation. These loss rates were normalized to cm/day. Estimates of seepage losses were obtained by subtracting average evaporation during Experiment 2 (0.35 cm/day) from rain-corrected losses in stage height. Stage heights of ponds also were measured daily to obtain mean water depth during experiments. Daily changes in stage height were used to obtain estimates of the quantity of makeup water that was required to maintain ponds at mean operating depth.

The PD/A CRSP protocol for Cycle I included measurements of chlorophyll a concentrations and Secchi disk transparencies at weekly intervals. Measurements of pond temperature, dissolved oxygen, pH, and alkalinity were obtained monthly by sampling over 24-hours at 4-hr intervals. Monthly measurements for different forms of phosphorus and nitrogen were only determined for Experiment 2.

Measurements in ponds and collections of water for analyses were taken from bamboo walkways that projected outward from the midpoint of dikes on the long axes of ponds. Temperature and dissolved oxygen were measured at three depths (25 cm below the surface, 25 cm above the bottom, and at mid-depth) using a YSI Model 58 Digital Dissolved Oxygen Meter. Whole water column samples were taken in 5 cm i.d. plastic tubes which were 1.3 m long. A drawstring was attached to a stopper that ran through the interior of each tube. Tubes were placed vertically in the water to depths about 10 cm above sediments and then closed on their distal ends by pulling on the stopper with the drawstring. Samples with debris from the sediments were discarded. Three debris-free samples were obtained from near the center of ponds with this procedure. These samples were pooled and analyzed for chlorophyll a, pH, alkalinity, phosphorus, and nitrogen. Techniques of Emerson et al. (1975) were used to determine the fraction of total ammonia that was present as un-ionized ammonia.

Estimates of net primary productivity in ponds were obtained from losses of inorganic carbon that occurred in ponds between 0430 and 1630 hr, which is dawn to dusk at Babakan. Vollenweider (1974) discussed this procedure for estimating primary productivity. A Lotus 1-2-3 spread sheet, developed at Michigan State University's Limnological Research Laboratory and based on the work of Harvey (1955) and Park (1969), was used to calculate diurnal changes in inorganic carbon from measurements of alkalinity, temperature, and pH. Total alkalinity was

measured with a Hach Model AL-DT Digital Titrator Test Kit.

RESULTS

In Figure 3, daily measurements of incident light present at pond surfaces is compared to expected full-sunlight for the Babakan region. The figure shows the general tendency for the maximum measurements of daily incident light to follow the expected full-sunlight curve, but with daily light substantially reduced due to cloud cover. In its wet tropical setting, the Babakan region had no days that approached full-sunlight during the interval of measurement. Expected full-sunlight during intervals of experiments was 58.3 moles of photons/m^2/day and 54.9 moles/m^2/day for Experiments 1 and 2, respectively. Mean daily PPFD for Experiment 1 was 29.9 moles/m^2. Mean daily PPFD for Experiment 2 was 29.3 moles/m^2. For the total time intervals of Experiments 1 and 2, total PPFD at the surface of ponds was 52% and 51% of full-sunlight, respectively.

Light penetration into ponds at the Babakan Fisheries Station was influence by relatively high turbidity. Source water and pond water tended to be brown due to suspended clay. In Figure 4, Secchi disk transparencies are plotted as a function of chlorophyll a concentrations. Mean Secchi disk transparencies for ponds ranged from 0.15 to 0.50 m. Chlorophyll a concentration and suspended algae containing the pigment were not correlated with observed transparency. For this site soil particle turbidity apparently accounted for the negative correlation which is often observed between chlorophyll a and Secchi disk transparency (Almazan and Boyd 1978).

Daily maximum and minimum air temperatures were restricted to a relatively narrow range. They showed no seasonal trends. Mean weekly maxima averaged 32.5°C and ranged from 30°C to 36.5°C. Mean weekly minima averaged 22.1°C and ranged from 21°C to 24°C. Rainfall was distributed such that no wet and dry seasons occurred. Total monthly rainfall was highest in April 1984 when 68.5 cm was recorded; June 1984 was the driest month with 22 cm of rain. During Experiments 1 and 2, ponds received an average rainfall of 1.5 cm/day and 1.2 cm/day, respectively.

Water loss from ponds by evaporation was low at Babakan. Measurements of evaporation were made during Experiment 2. Daily evaporation ranged from 0 to 3.8 cm, and averaged 0.35 cm. It is clear from daily rainfall estimates, and these evaporation data, that water gained from the atmosphere during experiments could have played a significant role in the water budgets of ponds, particularly those ponds that were well-sealed and lost little water by seepage.

Daily wind speed measurements at the Babakan Station were consistently low. They averaged 0.7 m/sec and 0.9 m/sec during Experiments 1 and 2 respectively. Thus, hot, water-laden air masses tended to move very slowly over the site during all months of the year. Average wind speed was 0.8 m/sec.

Soils at the Babakan Station and in the surrounding area consist predominantly of fine-grained material. For example, soil samples taken from ponds at the beginning of Experiments 1 and 2 had a mean of 84% fine silt and clay (particles <0.02 mm in diameter) by dry weight. The clay fraction (62% of dry weight) was predominantly halloysite (X-ray diffraction, Soil Research Institute, Bogor). This mineral is a common product of soil formed from volcanic overburden in the region (Subardja and Buurman 1980). Unlike many common clays, halloysite

does not swell when wet. Hence, fine-grained soils of the Babakan region were relatively permeable to water. Water loss and replacement rates for ponds were estimated for Cycle I experiments. Results of these hydrology measurements are given in Table 1.

Table 1 shows that water loss rates were variable among ponds during Experiment 1. Five of 12 experimental units lost 20% or more of their mean operating volume on the average day, while three units lost less than 10%, and four had loss rates intermediate between these. Additions of source water required to maintain mean pond depths were similarly distributed. Mean pond depths varied from 0.74 to 0.89 m. In the time between Experiments 1 and 2, procedures were used to reduce seepage losses. For ponds with high loss rates, trenches were dug along the exterior of walls to below their bases, and soil was compacted into the trenches as they were refilled. Stone/cement floors were put in place to help seal four of the ponds: numbers 9 through 12. Two weeks later, 8 cm of soil was spread over the cement floor. Results of this work are indicated in Table 1. Water loss rates were reduced during Experiment 2. Additions of water required to maintain mean depths fell from high values in Experiment 1 to between 3% and 11% of pond volume per day in Experiment 2. Mean pond depths ranged from 0.84 m to 0.98 m during Experiment 2.

Tables 2 and 3 summarize data for temperature, dissolved oxygen, and pH. Mean surface temperatures of ponds varied during experiments from 26 and 31°C, and bottom temperatures ranged from 27 to 29°C. Surface temperatures increased during the daytime by 2 to 3°C, cooling back down at night. The mean daily increase in surface temperature for all ponds was 2.4°C during Experiment 1, and 2.8°C during Experiment 2. The increase in temperature during daytime near the bottom of ponds was less than near the surface. On the average, temperature increase near pond bottoms was about 0.5°C in both experiments. Ponds were homothermal in early morning. Daytime temperature changes resulted in small thermal differences between warmer surface water and cooler bottom water by late afternoon: the average difference was 1.8°C during Experiment 1 and 2.1°C during Experiment 2.

Distribution of mean dissolved oxygen concentrations in ponds followed the same general patterns as those for temperature (Tables 2 and 3). In early morning, concentrations varied little through the water column. By late afternoon concentrations were higher in surface water than in water near the bottom. During the daytime, surface concentrations of oxygen increased by a mean of 3.3 mg/l in Experiment 1 and 3.8 mg/l in Experiment 2. Mean daytime changes in dissolved oxygen in bottom waters were variable during the two experiments, and were zero or negative for nearly half of the ponds listed in Tables 2 and 3. Mean differences in late afternoon between surface and bottom water were 3.9 mg/l and 3.3 mg/l for Experiments 1 and 2, respectively.

Ponds at the Babakan Fisheries Station were generally well-oxygenated at all depths throughout 24-hr periods. In late afternoon, surface waters were always supersaturated (Tables 2 and 3). Nighttime losses to the atmosphere and respiration of pond communities tended to cause under-saturation in early morning hours. By the following morning, however, most ponds were under-saturated, except for ponds 9 through 12 in Experiment 2 which remained supersaturated, or near saturation.

Daytime increases in dissolved oxygen in ponds and supersaturation in late afternoons as well as increases in pH were the result of photosynthesis. This is shown in Tables 2 and 3. During Experiment 1, mean pH in ponds in early morning ranged from 6.6 to 6.9 and then rose during daylight hours. By late afternoon, pH ranged between 7.2 and 8.3. Mean pH rise for all ponds was 1.0 in Experiment 1. Daytime rises in pH also occurred in ponds during Experiment 2. Ponds 9 through 12 had higher pH in early morning and late afternoon than the

other ponds and small daily increases which averaged 0.5 pH units. For ponds 2 through 8, mean pH ranged from 6.9 to 7.5 in early morning for Experiment 2. By late afternoon mean pH ranged from 8.1 to 8.7, and the mean daily increase for ponds 2 through 8 was 1.0 pH units.

Production of Nile tilapia at the Babakan Fisheries Station during these experiments is given in Table 4. It is clear from these data that fish were stocked at weights close to the carrying capacity for the conditions of pond management that were used. Survival was somewhat higher in Experiment 2 than in Experiment 1. Final weights of fish convert to harvests of 560 kg/ha and 605 kg/ha for Experiments 1 and 2, respectively.

Net primary productivity was estimated for ponds in order to assess growth response of algae to nutrients and the concomitant dependence of fish production on these organisms. Data on algal nutrient concentrations were available for Experiment 2 only, and estimates of net primary productivity for that experiment are presented later (Table 6). Mean rates of primary productivity ranged from 0.049 to 0.120 mmoles carbon/l/day. Based on mean pond depths given in Table 1, these productivities converted to a range of 0.52 to 1.32 mg $C/m^2/day$. As a group, ponds 9 through 12 had higher productivities than the other ponds. Mean productivity for these four ponds was 1.18 mg $C/m^2/day$; mean productivity for the other ponds was 0.79 mg $C/m^2/day$. Pond productivities are shown in Figure 5 in relation to mean alkalinities. High productivities of ponds 9 through 12 were associated with high alkalinity in these units.

Phosphorus and nitrogen are algal nutrients of prime concern in fish ponds because of their potential limiting role in primary productivity. Un-ionized ammonia has been associated with growth limiting effects on fish (Colt and Tchobanoglous 1978). Table 5 summarizes data from Experiment 2 on un-ionized ammonia and forms of phosphorus and nitrogen preferred for uptake by algae (Goldman and Horne 1983). The outstanding feature of these data is differences in concentrations of nutrients between ponds 2 through 8 and ponds 9 through 12. Soluble reactive phosphorus and un-ionized ammonia were higher in ponds 9 through 12, however, concentrations of other nitrogen forms tended to be lower in these ponds than in ponds 2 through 8.

DISCUSSION

Data obtained during these experiments describe baseline conditions for pond aquaculture at the Babakan Fisheries Station. The outstanding feature of climate was the lack of annual variation commonly associated with seasons. In many parts of the tropics seasons occur as extended wet and dry episodes. At Babakan, measurements of air temperature, rainfall, and light each lacked strong seasonal attributes. The atmosphere at ground level was warm: 24 hr maximum and minimum temperatures averaged 32.5 and 22.1°C, respectively. Walter (1979) reported that annual variation in air temperature is small at Bogor, mean monthly air temperature ranges from 24.3°C in February to 25.3°C in October. Schmidt and Ferguson (1951) report a 20-year average for precipitation at Bogor of 3.55 m. At the Babakan Fisheries Station during these experiments there was 4.93 m of precipitation per year. Consistent with observations reported in the literature (Schmidt and Ferguson 1951, Fontanel and Chantefort 1978, and Premo 1985), no true dry season was observed during the 13 months of record at Babakan. Relatively dry, and presumably well-lit intervals do occur in West Java when low pressure systems of the equatorial Pacific shift eastward giving rise to El Niño phenomena (Canby 1984). The last of these occurred in 1982-83 (Simon 1983). However, for the period of this study, the climate was consistently hot and wet.

The daylight period for pond photosynthesis at Babakan ranged from 12 to 11 hr and 29 min during the course of a year. Light incident on ponds was highly variable from one day to the next, depending primarily on the density and duration of cloud cover. For long intervals (i.e., 142- and 146-day experiments), mean daily PAR (photosynthetically active radiation) was between 29 and 30 moles of photons per m^2 with no clear trends toward seasonality. Maximum daily input measured at Babakan was 49 moles/m^2, and minimum daily input was 9 moles/m^2. This annual range of daily photosynthetic photon flux density (PPFD) was close to the range reported by Duffy et al. (1987) for a mid-continental temperate zone station in the Great Lakes Region of the United States (46.3°N, 84.2°W) during the spring and summer growing season. Mean daily PPFD for months of the growing season at their site was 32 moles/m^2. Kelly et al. (1983) report that annual maximum daily PPFD at a high latitude (57°N) location was approximately 70 moles/m^2 for long days around the summer solstice and mean daily PPFD during the growing season was approximately 40 moles/m^2. In parts of the tropics with distinct wet and dry seasons, annual variation greater than that observed at Babakan is expected between seasons.

In addition to relatively consistent climate and incident light, soil permeability and associated seepage at Babakan was an outstanding physical attribute. During Experiment 1, mean water loss was 19% of pond volume per day. In the time between Experiments 1 and 2, seepage problems were rectified and variability as well as the magnitude of loss rates were reduced. Water loss rates for ponds in Experiment 2 ranged from 4 to 12% of pond volume per day with a mean of 8%. The literature reports lower water loss rates for ponds. For example, water loss rates for a site in Alabama (Boyd 1979) were six to 10 times lower than those measured at Babakan. Indifference to seepage loss in the Babakan region was due to a plentiful supply of water for pond culture. During experiments, the range in rainfall on pond surfaces was from 0 to 18% of pond volume per day. Irregular high rainfall and additions of make-up water on an irregular schedule caused large variability in measurements within ponds. Nevertheless, data from ponds showed clear trends regarding environmental conditions for fish culture.

Mean temperature throughout the water column of ponds at Babakan was 29 $\pm$ 3°C. Ponds were homothermal in early morning. Water at all depths in ponds gained heat during days. Temperature increased approximately 2.5°C near the surface and 0.5°C in water near the bottom between early morning and late afternoon. Ponds cooled at night, particularly near the surface and tended to return to the homothermal regime of the previous morning. With this pattern, ponds were potentially monomictic on a 24-hour cycle. Low-rate air flow over pond surfaces (0.8 m/sec) combined with density currents generated by water cooling at the surface at night were expected to promote mixing, particularly in the hours before dawn. Density differences that developed during daytime between warm surface water and cooler bottom water were an impediment to mixing the water column.

Similar to temperature, dissolved oxygen was homogeneously distributed throughout the water column at dawn. Between early morning and late afternoon, dissolved oxygen at 25 cm above sediments in ponds showed little or no variation (Tables 2 and 3). However, water at 25 cm below the surface increased on average 3.6 mg/l during the same time interval. Using mean water column concentrations, daytime increases in dissolved oxygen were small compared to the 5 mg/l reported by Boyd (1979). At Babakan, mean daytime increases for individual ponds ranged from 0.67 to 2.80 mg/l and averaged 1.69 mg/l for both experiments. From the data, oxygen losses in ponds during nighttime appeared to be small and on the same order as daytime increases. For fertilized ponds at temperatures similar to Babakan's (30°C), Hepher (1962) measured mean nighttime losses of approximately 5 mg/l. Boyd et al. (1978) report losses as high as 6 mg/l for 12-hr periods in pond water at 30°C with high density plankton

communities. Due to small losses at night, pond water at Babakan was always well-oxygenated at dawn. Dissolved oxygen concentrations at all depths were always greater than 4.5 mg/l. These results show that ponds in these experiments had low photosynthetic and respiratory rates compared with fertilized fish ponds elsewhere.

Fish production in ponds at Babakan was low during these experiments. Harvests of 560 and 605 kg/ha were obtained after grow-out periods of 142 and 146 days in Experiments 1 and 2, respectively. Fish were stocked close to carrying capacity for the pond management regime used. Net fish weight during grow-out periods was negative for some ponds in both experiments. Mean net weight gain for all ponds in Experiment 1 was 0; for Experiment 2 it was 10 kg/ha. In comparison, Pownall (1975) reported average yields of 1500 kg/ha/yr, for farm ponds in West Java, with yields of some farmers reaching 3000 kg/ha/yr. However, Cyprinus carpio accounted for most of the production in these ponds. DeMaeseneer (1984) cites production of 2000 kg/ha/yr for tilapia in tropical subsistence ponds that are intensely managed. Balarin (1984) reported that 5000 kg/ha/yr of tilapia should be obtained in well-managed ponds using fertilizers and feed supplements.

Un-ionized ammonia concentrations were determined for ponds to assess their effect on fish growth. Concentrations varied during 24-hour periods with changes in pH and temperature. Minimum concentrations were observed at 0430 hr when pH and temperature were low. Maximum concentrations occurred at 1630 when these parameters reached 24-hour highs. Concentrations in ponds 2 through 8 were lower than those in ponds 9 through 12. Mean maximum concentrations ranged from 0.05 to 0.09 mg NH_3-N/l in the former, and from 0.10 to 0.17 mg NH_3-N/l in the latter. These were at the bottom of the range for un-ionized ammonia (0.06 to 0.99 mg NH_3-N/l) shown by Colt and Tchobanoglous (1978) to retard growth in a linear fashion. Working with juvenile channel catfish (Ictalurus punctatus) they found growth suppressed by 50% at 0.52 mg/l, and 100% at 0.97 mg/l. Their work and that of others (Boyd 1982) would suggest that growth retarding effects of un-ionized ammonia were small during Experiment 2, but were potentially higher in ponds 9 through 12.

Nile tilapia is opportunistic and feeds mainly on planktonic algae, periphytic algae, rotifers, copepods, insect larvae and detritus (DeMaeseneer 1984). Thus, the food web on which Nile tilapia depend is supported by primary productivity and whatever detritus is present in make-up water or sediments. Low fish production in ponds at Babakan indicated that these food resources were scarce.

Dissolved oxygen data suggested that detritus and organisms that metabolize detritus were in relatively low abundance in ponds at Babakan. Low rates of oxygen loss, associated at least in part with heterotrophic detrital metabolism, occurred in ponds at night. Some fraction of oxygen loss was to the atmosphere from surface layers that were always supersaturated at nightfall (Schroeder 1975). Algal production was also low in ponds. Mean net primary production ranged from 0.52 to 1.32 g C/m^2/day with an overall mean of 0.93 g C/m^2/day, which is slightly less than that reported by Hepher (1962) for warm (30°C) fertilized fish ponds in Israel (i.e., 2.9 g C/m^2/day).

Conditions of frequent and dense cloud cover at Babakan suggested that low incident light could play a role in limiting primary productivity in ponds. However, utilization of light that was available at the surface of ponds was poor. Areal photosynthetic efficiencies (PE = energy photosynthetically stored in primary producers per m^2/energy per m^2 at the surface x 100) were calculated for ponds from daily rates of inorganic carbon uptake and records of surface PPFD. Energy units for photosynthesis and incoming light were obtained from constants: 114 Kcal/mole CO_2 used in net photosynthesis (Lehninger 1975) and 2.77 x 10^{18} photons/sec/watt

(Morel and Smith 1974) for incoming PPFD. One watt equals 14.3 cal/min. The PE's for ponds in these experiments were low. They ranged from 0.31% to 0.80% and averaged 0.56%. PE's based on photosynthetically active radiation (400 to 700 nm photons) range from 1 to 4% for phytoplankton in productive aquatic environments (Wetzel 1983). Low PE's at Babakan indicated that surface light was used poorly within ponds and that something else was responsible for low primary productivity.

The underwater light environment in ponds at Babakan was influenced by high clay turbidity that is a common feature of surface waters on Java (McNabb et al. in review). The limiting influence of clay on light penetration and primary productivity in ponds is difficult to assess. However, compensation depths for pond communities, namely depths at which the net oxygen balance between photosynthetic and consumptive processes were zero, could be taken from early morning and late afternoon vertical oxygen profiles. The compensation depth was close to 25 cm above bottoms of ponds, where no change, or small daytime changes in dissolved oxygen occurred. Mean pond depths varied between 0.74 and 0.98 m during experiments. Thus euphotic zones of ponds were on the order of 0.5 to 0.75 m deep. Such depths of euphotic zones are not unusual for productive fish ponds. For example, Hepher (1962) found compensation depths that ranged from 0.3 to 0.6 m in ponds with high algal productivity. However, mean net primary productivity in euphotic zones at Babakan was nearly three times lower than in his ponds where suspended algae were a principal component of turbidity. From this observation and low photosynthetic efficiencies given above, light in ponds at Babakan does not appear to be a principal cause of low primary productivity during these experiments.

From the data, algal nutrients appear to be implicated as limiting factors for primary productivity. Measurements of phosphorus, nitrogen and inorganic carbon were available from work during Experiment 2. Phosphorus, nitrogen and carbon are required by algae for growth in an approximate ratio of 1:16:100 by atoms, or 1:7:40 by weight (Round 1973, Vallentyne 1974, Wetzel 1983). Amounts of inorganic carbon used daily by net photosynthesis were determined for ponds in the course of the experiments. Estimates of phosphorus and nitrogen required daily to meet the ordinary growth needs of algae in relation to daily carbon uptake were calculated using the ratios given above. In Table 6 these required amounts are compared to mean concentrations of preferred forms of phosphorus and nitrogen present in ponds (Goldman and Horne 1983). The closer the requirements in the table are to the average amounts present, the shorter the immediate supply of the nutrient. Amounts of phosphorus present in ponds were 2 to 6 times daily requirements. Amounts of nitrogen in ponds 2 through 8 were 2 to 5 times daily requirements, while daily nitrogen requirements for ponds 9 through 12 were close to or less than amounts present. This treatment of the data shows that relative to the requirements of algae for these nutrients, phosphorus and nitrogen were abundant in ponds, except for nitrogen in ponds 9 through 12.

Md. Yusoff (1987) used algal bioassays in conjunction with the above procedure to show that algal productivity was not limited in her ponds when required amounts of these nutrients were greater than or approximately equal to amounts present. However, algal productivity was limited when concentrations of dissolved reactive phosphorus or inorganic nitrogen were 4 to 6 times less than daily requirements. Thus, all ponds at Babakan apparently had adequate nitrogen as well as adequate phosphorus to support carbon fixation rates that occurred in ponds. The average margin of surplus for inorganic nitrogen, however, was less in ponds 9 through 12 than in other ponds. This could be attributed to higher rates of primary productivity in ponds 9 through 12 relative to other ponds.

Between Experiments 1 and 2, cement bottoms were put in place in ponds 9 through 12 as a long-term solution to excessive seepage loss that occurred at Babakan. These were covered with 8 cm of soil after the cement set. Data showed that this treatment was no more effective than other procedures used to retard seepage (Table 1). However, cement pond bottoms provided a treatment not used in the other ponds. In particular, the cement increased alkalinity in these ponds. The range of alkalinity measured for ponds in Experiment 1, and for ponds 2 through 8 in Experiment 2, was from 9 to 30 mg $CaCO_3$/l with a mean of 21 mg $CaCO_3$/l. The range of alkalinity for ponds 9 through 12 in Experiment 2 was 29 to 60 mg $CaCO_3$/l with a mean of 37 mg $CaCO_3$/l. The increased alkalinity and pH in the cement-bottomed ponds is explained by the solubilization of hydrated lime present in cement (Boyd 1982).

King and Garling (1983) discuss relationships between alkalinity, inorganic carbon, and primary productivity in fish ponds. A rise in alkalinity increases the amount of inorganic carbon available for photosynthesis. The relationship between the daily net photosynthesis in ponds and alkalinity for Experiment 2 has been shown in Figure 5. As a group, ponds 9 through 12 had higher rates of photosynthesis and higher alkalinities than other ponds in the experiment. This result suggests that the low supply of inorganic carbon for photosynthesis was an important factor limiting algal productivity, general pond metabolism as expressed through low diurnal oxygen excursions, and low fish production at Babakan. The work of King (1970, 1972), King and Novak (1974), and Young and King (1980) predicts such a result for low alkalinity fish ponds like those at Babakan in which phosphorus and nitrogen were abundant relative to the alkalinity present. This result needs to be confirmed in future cycles of CRSP experiments. The implications are very important for management of fertilized ponds in geological settings like those of Java. In Java, drainage basins in which discharge water has alkalinities of 25 and 180 mg $CaCO_3$/l occur side by side (McNabb, unpublished data). If inorganic carbon determines the upper limit of fish-food production and fish yield in ponds in these drainage basins with low alkalinity, then similar rates of application of fertilizers across the countryside will result in inconsistent fish yields from place to place.

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Table 1. Aspects of water budgets of ponds at the Babakan Fisheries Station during Experiments 1 and 2 in Cycle I.

Pond	Mean Loss Rate[1] (m^3/hr)		Seepage cm loss/day[2]		% Pond Volume loss/day[3]		Rain Corrected % Volume addition/day[4]		Mean Pond Depth (m)	
	Exp 1	Exp 2	Exp 1	Exp 2	Exp 1	Exp 2	Exp 1	Exp 2	Exp 1	Exp 2
1	0.55		6.2		7		5		0.89	
2	1.85	0.50	21.8	5.6	30	7	28	6	0.75	0.84
3	2.32	0.39	27.4	4.3	38	6	36	5	0.74	0.85
4	1.10	0.67	12.8	7.6	17	9	15	8	0.79	0.88
5	1.63	0.28	19.2	3.0	24	4	22	3	0.83	0.92
6	0.54	0.83	6.1	9.6	8	12	6	11	0.80	0.86
7	0.80	0.89	9.2	10.3	11	12	9	11	0.86	0.89
8	1.10	0.72	12.8	8.2	17	10	15	9	0.79	0.87
9	1.88	0.44	22.2	4.9	26	5	24	4	0.86	0.97
10	1.48	0.56	17.4	6.3	21	7	19	6	0.85	0.98
11	0.96	0.56	11.1	6.3	15	7	13	6	0.78	0.93
12	0.65	0.28	7.4	3.0	9	4	7	3	0.83	0.92

[1]Data were corrected for rainfall: loss shown was due to evaporation and seepage.

[2]Mean loss rate corrected for evaporation at average rate measured: 0.35 cm/day.

[3]Loss due to seepage and evaporation calculated from seepage loss/day plus 0.35 cm evaporation/day divided by mean depth of ponds in cm x 100.

[4]Volume of make-up water required each day to maintain ponds at mean depth. Obtained from % pond volume loss/day minus % pond volume rain added/day, where mean rainfall was 1.5 cm/day for Experiment 1 and 1.2 cm/day for Experiment 2.

Table 2. Cycle I, Experiment 1: a comparison of means for daily minima (0430 hr) and maxima (1630 hr) for temperature, dissolved oxygen and pH in ponds at the Babakan Fisheries Station.

Pond	Depth[1]/Time	Temperature (°C)		Dissolved O_2 (mg/l)		% O_2 Saturation		pH	
		0430	1630	0430	1630	0430	1630	0430	0630
1	Top	27.2	29.4	6.3	10.1	82	136	6.7	8.1
	Middle	27.2	28.3	6.1	6.9				
	Bottom	27.3	27.6	5.9	5.7				
2	Top	27.0	29.7	5.8	9.6	75	130	6.7	7.7
	Middle	27.1	28.0	5.4	5.9				
	Bottom	27.3	27.5	4.5	5.1				
3	Top	26.8	29.4	5.8	9.2	75	124	6.7	7.4
	Middle	26.9	28.2	5.7	5.2				
	Bottom	26.9	27.4	5.5	4.7				
4	Top	27.2	29.5	6.4	9.6	83	129	6.8	7.7
	Middle	27.3	28.7	6.4	6.7				
	Bottom	27.3	27.8	6.2	5.8				
5	Top	27.0	29.5	6.4	10.1	83	136	6.8	7.8
	Middle	27.2	28.2	6.3	6.8				
	Bottom	27.1	27.5	6.3	5.5				
6	Top	27.4	29.8	6.7	9.7	87	131	7.2	8.3
	Middle	27.8	29.4	6.6	8.7				
	Bottom	27.8	28.5	6.8	7.0				
7	Top	27.5	29.8	6.5	9.4	85	127	7.1	7.7
	Middle	27.6	29.0	6.5	8.3				
	Bottom	27.6	28.3	6.4	6.6				
8	Top	27.2	29.8	6.9	10.9	89	148	6.9	7.6
	Middle	27.3	28.6	6.9	8.2				
	Bottom	27.3	27.9	6.8	6.9				
9	Top	27.0	29.2	5.9	9.2	76	123	6.8	7.5
	Middle	27.1	28.6	5.9	6.6				
	Bottom	27.1	27.6	5.8	5.3				
10	Top	26.9	29.4	6.0	8.6	77	116	6.6	7.2
	Middle	27.1	28.6	5.9	6.5				
	Bottom	27.1	27.7	5.5	5.5				
11	Top	26.8	29.1	5.9	8.8	76	118	6.7	7.4
	Middle	26.8	28.0	5.8	6.9				
	Bottom	26.8	27.2	5.7	5.6				
12	Top	27.2	29.6	6.0	9.5	78	128	6.8	7.7
	Middle	27.3	28.9	6.1	7.0				
	Bottom	27.3	28.0	5.8	5.8				

[1]Top measurements were made at 25 cm depth and bottom at 25 cm above the sediments.

Table 3. Cycle 1, Experiment 2: a comparison of means for daily minima (0430 hr) and maxima (1630 hr) for temperature, dissolved oxygen and pH in ponds at the Babakan Fisheries Station.

Pond	Depth[1]/Time	Temperature (°C)		Dissolved O_2 (mg/l)		% O_2 Saturation		pH	
		0430	1630	0430	1630	0430	1630	0430	0630
2	Top	28.1	30.6	5.6	9.1	74	125	6.9	8.1
	Middle	28.1	29.5	5.5	7.1				
	Bottom	28.1	28.8	5.5	5.7				
3	Top	27.9	30.7	5.2	8.4	68	116	7.0	8.1
	Middle	27.9	29.3	5.2	6.2				
	Bottom	27.9	28.4	5.2	4.8				
4	Top	27.6	30.5	6.5	11.5	85	158	7.2	8.3
	Middle	27.7	28.8	6.5	8.5				
	Bottom	27.6	28.1	6.3	6.6				
5	Top	27.6	30.3	6.2	10.3	81	141	7.3	8.7
	Middle	27.6	28.6	6.1	7.8				
	Bottom	27.6	28.0	6.1	5.3				
6	Top	27.7	30.5	6.3	9.9	82	136	7.4	8.5
	Middle	27.8	28.9	6.3	8.4				
	Bottom	27.8	28.2	5.7	5.5				
7	Top	27.8	30.7	6.1	9.5	80	131	7.5	8.4
	Middle	27.8	29.2	6.1	7.8				
	Bottom	27.8	28.6	6.1	6.7				
8	Top	27.6	30.8	6.2	11.2	81	154	7.5	8.6
	Middle	27.6	29.2	6.2	8.4				
	Bottom	27.6	28.3	6.0	6.6				
9	Top	28.0	30.8	9.2	12.9	121	178	9.2	9.5
	Middle	28.1	29.1	9.2	11.7				
	Bottom	28.1	28.9	9.0	10.8				
10	Top	27.8	30.4	7.1	10.8	93	148	9.1	9.6
	Middle	27.9	29.3	7.1	9.3				
	Bottom	27.9	28.8	7.0	8.1				
11	Top	27.9	30.8	9.3	12.8	122	177	9.4	9.6
	Middle	28.0	29.3	9.3	12.2				
	Bottom	28.0	28.6	9.3	10.8				
12	Top	28.2	30.8	8.0	11.3	105	156	9.1	9.6
	Middle	28.2	29.3	8.0	11.2				
	Bottom	28.2	28.9	8.0	10.0				

[1]Top measurements were made at 25 cm depth and bottom at 25 cm above the sediments.

Table 4. Production of Nile tilapia (Oreochromis niloticus) during grow-out periods of 142 and 146 days for Experiments 1 and 2 of Cycle I, respectively at the Babakan Fisheries Station. Fish were stocked at 200 per pond ($1/m^2$).

	Experiment 1			Experiment 2		
Pond	Initial Weight (kg)	Final Weight (kg)	Survival (%)	Initial Weight (kg)	Final Weight (kg)	Survival (%)
1	10.5	8.8	79			
2	10.0	10.3	99	13.5	14.3	98
3	11.4	12.4	90	11.5	12.7	95
4	11.6	10.4	86	11.5	12.5	90
5	11.6	13.0	91	11.5	12.1	89
6	11.6	12.7	92	12.5	14.4	91
7	11.0	12.0	88	12.5	12.4	99
8	11.5	10.2	69	12.5	11.5	95
9	11.0	11.7	93	12.0	11.7	100
10	11.0	10.1	91	10.5	8.1	83
11	11.0	11.0	97	11.5	10.9	90
12	12.2	12.0	92	11.5	12.5	100
Means	11.2	11.2	89	11.9	12.1	94

Table 5. Mean concentrations of selected forms of phosphorus and nitrogen in ponds at the Babakan Fisheries Station for Experiment 2 of Cycle I.

Pond	Dissolved Reactive P (mg/l)	NO_2+NO_3-N (mg/l)	Total NH_3-N (mg/l)	Un-ionized NH_3-N (mg/l)[1]
2	0.08	0.09	0.35	0.09
3	0.08	0.11	0.32	0.05
4	0.04	0.39	0.18	0.06
5	0.08	0.15	0.21	0.08
6	0.06	0.44	0.22	0.09
7	0.07	0.18	0.18	0.07
8	0.08	0.36	0.23	0.07
9	0.15	0.03	0.31	0.17
10	0.11	0.03	0.17	0.12
11	0.13	0.03	0.16	0.14
12	0.14	0.01	0.12	0.10

[1]Maximum 24-hour concentrations occurred with daytime rises in pH and temperature. These concentrations are for 1630 hr. Mean concentrations at 0430 hr ranged from 0.00 to 0.01 mg/l for ponds 2 through 8, and 0.06 to 0.12 mg/l for ponds 9 through 12.

Table 6. Estimates of daily phosphorus and nitrogen requirements of algae relative to the abundance of selected forms of these nutrients in ponds at the Babakan Fisheries Station for Experiment 2 of Cycle I.

Pond	Net Primary Productivity (g C/m^2/day)	Dissolved Reactive P (g/m^2)		Total Inorganic-N (g/m^2)	
		Required[1]	Present[2]	Required[1]	Present[2]
2	0.84	0.02	0.07	0.15	0.37
3	0.98	0.02	0.07	0.17	0.37
4	0.94	0.02	0.04	0.17	0.50
5	0.83	0.02	0.07	0.15	0.33
6	0.83	0.02	0.05	0.15	0.57
7	0.52	0.01	0.06	0.09	0.32
8	0.61	0.02	0.07	0.11	0.51
9	1.19	0.03	0.15	0.21	0.33
10	1.12	0.03	0.11	0.20	0.20
11	1.10	0.03	0.12	0.19	0.18
12	1.32	0.03	0.13	0.23	0.12

[1]Needed for growth with g C/m^2/day net productivity given in column 2 assuming 1:7:40 weight ratio of P:N:C required by algae (Round 1973, Vallentyne 1974, Wetzel 1983).

[2]Mean concentrations in ponds.

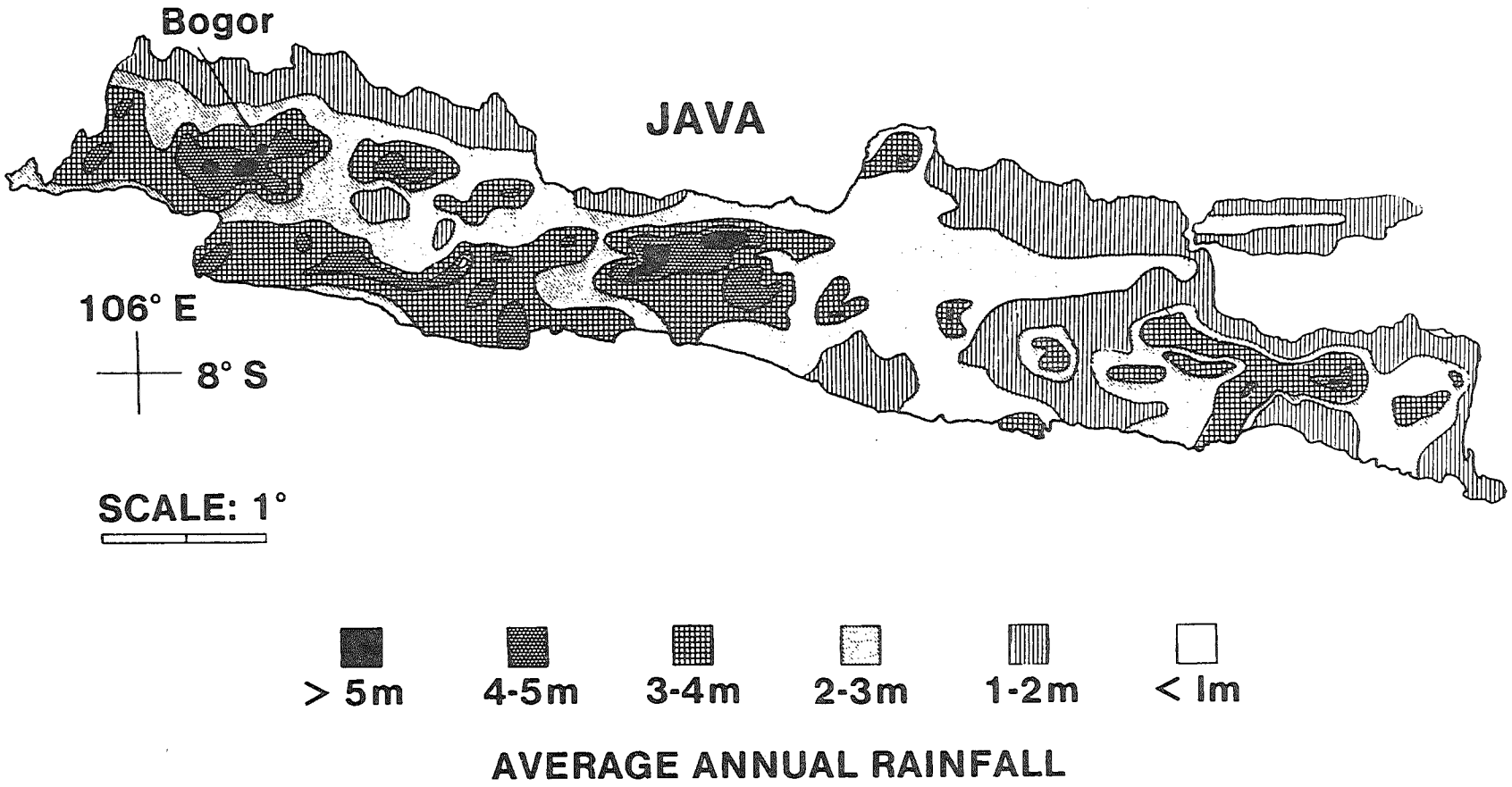

Figure 1. Distribution of average annual rainfall on the islands of Java and Madura in the Republic of Indonesia (Anon. 1973).

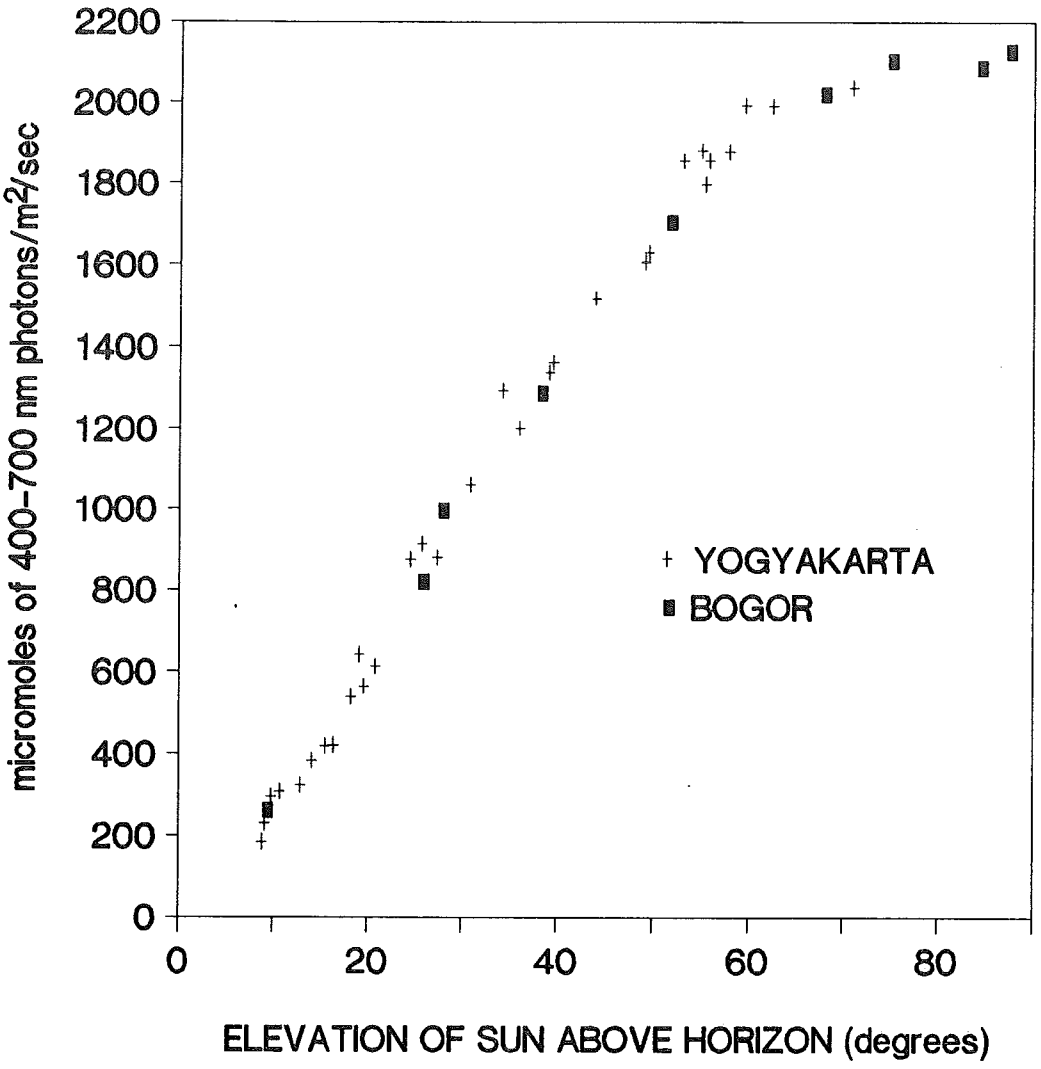

Figure 2. Estimates of full-sunlight photon flux densities measured at elevations between 100 m and 220 m above mean sea level at two sites in Java during 1984-85.

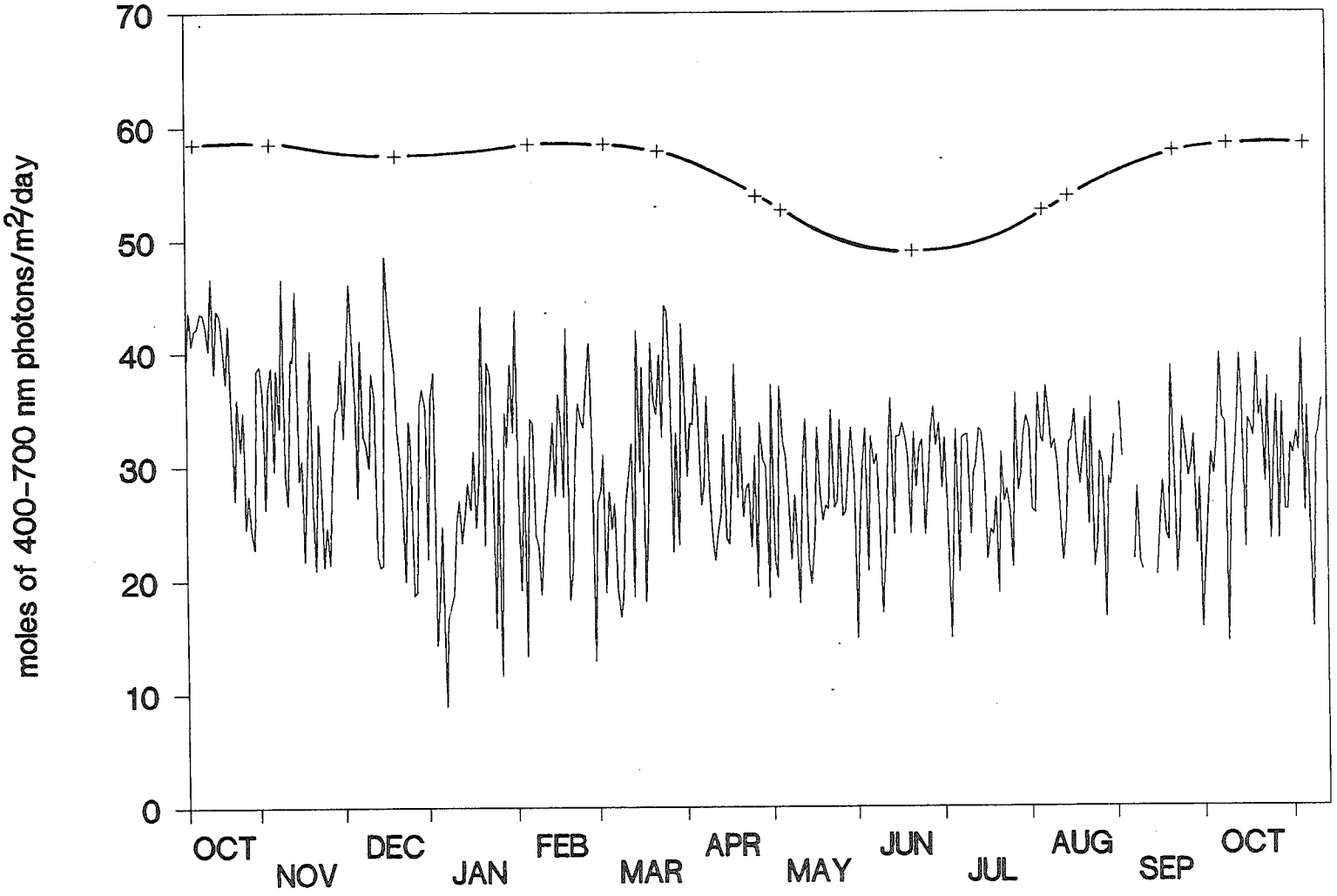

Figure 3. Photosynthetically active radiation in the Babakan region for the interval October, 1983 to November, 1984. Smooth curve is for potential full-sunlight at ground level, and irregular curve is for daily measurements at ground level.

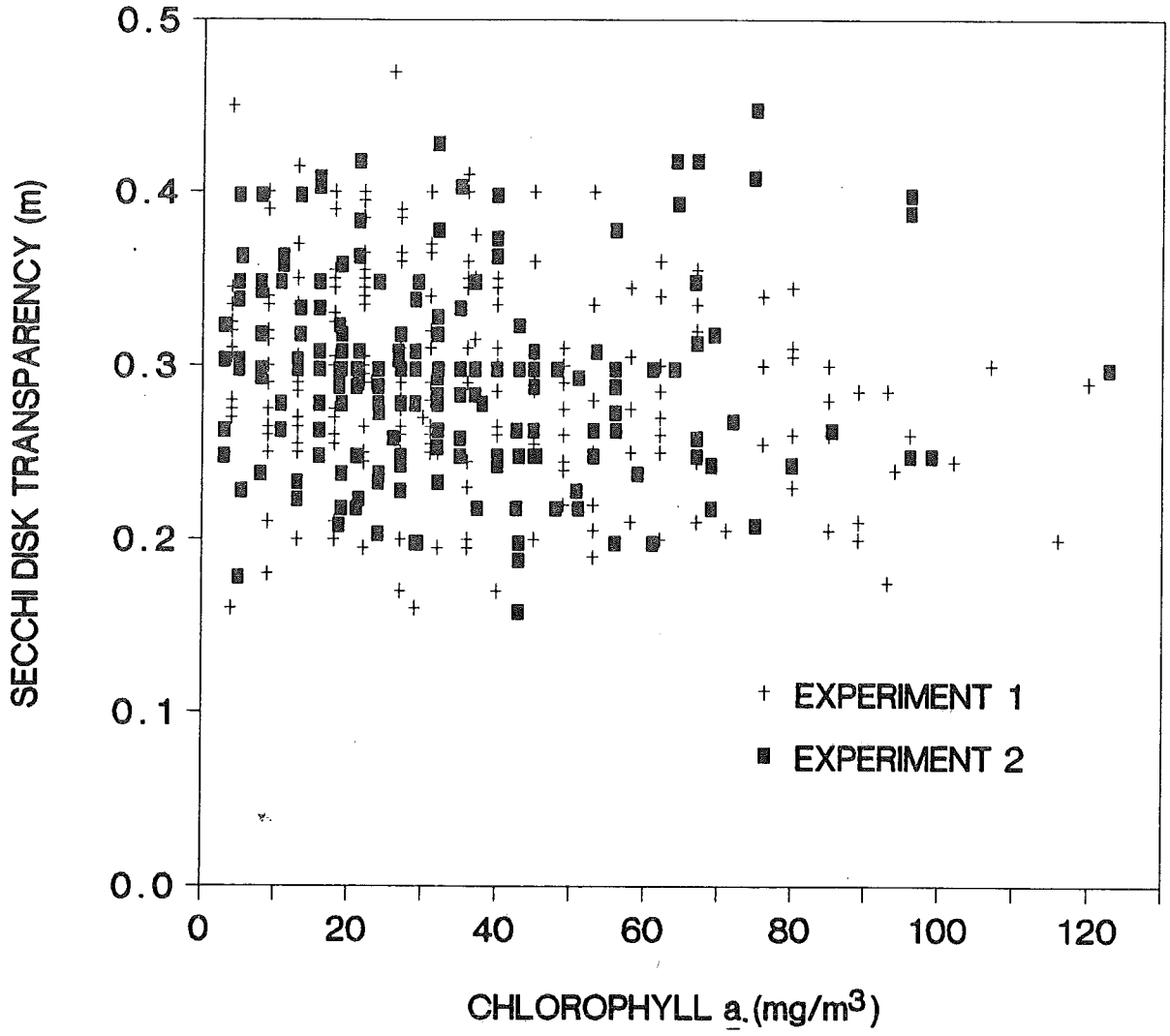

Figure 4. Relationship between Secchi disk transparency and chlorophyll *a* for Experiments 1 (plus signs) and 2 (squares) of Cycle I.

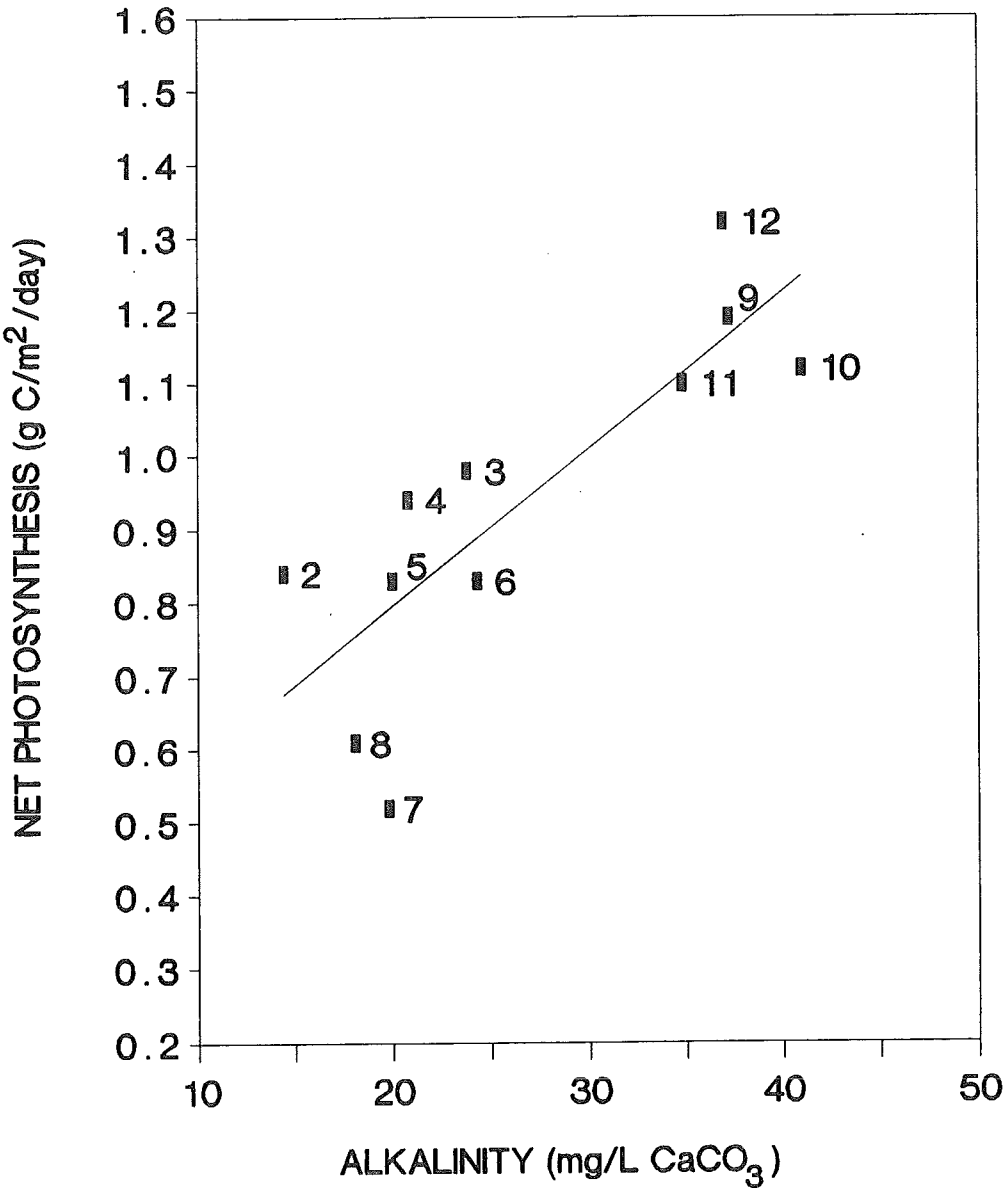

Figure 5. The relationship between mean rates of photosynthesis and mean alkalinity in ponds at the Babakan Fisheries Station during Experiment 2 of Cycle I. The line shown is the best fit by least squares regression.

Appendix. Complete set of data from Cycle I of the Pond Dynamics/Aquaculture CRSP in Indonesia

TABLE 1

Daily Weather Measurements. Bogor, Indonesia, Cycle I

DATE			SOLAR RADIATION		RAIN	MEAN WIND	AIR TEMP MAX.	MIN.
DAY	MONTH	YEAR	E/m2/d	cal/cm2/d	cm/d	km/hr	deg C	deg C
XX	XX	XXXX	XX.XX	XXXXXX	XX.X	XX	XX.X	XX.X
1	1	1984	21.93		2.2	2	31.7	21.7
2	1	1984	35.89		3.9	2	31.7	21.7
3	1	1984	38.34		2.5	2	33.3	21.7
4	1	1984	14.39		2.3	1	33.3	22.2
5	1	1984	18.61		4.5	1	28.3	22.8
6	1	1984	24.85		6.2	1	30.6	21.1
7	1	1984	8.91		2.1	0	29.4	21.7
8	1	1984	16.60		2.1	0	29.4	21.7
9	1	1984	17.71		1.0	0	26.7	20.6
10	1	1984	18.91		1.5	0	29.4	21.7
11	1	1984	25.05		0.3	1	30.0	22.8
12	1	1984	27.15		4.3	1	31.7	21.7
13	1	1984	23.35		3.8	1	31.1	21.1
14	1	1984	26.03		1.6	2	31.1	21.7
15	1	1984	28.63		1.7	2	31.1	21.7
16	1	1984	26.28		0.8	0	29.4	22.2
17	1	1984	31.39		0.0	1	32.8	23.3
18	1	1984	24.70		0.6	1	31.1	22.8
19	1	1984	28.74		0.1	2	30.6	23.9
20	1	1984	44.21		2.2	3	35.0	20.6
21	1	1984	23.14		0.0	8	37.2	21.7
22	1	1984	39.22		0.0	8	37.2	21.7
23	1	1984	38.16		0.0	6	35.0	23.3
24	1	1984	28.91		2.2	5	30.6	22.8
25	1	1984	15.87		1.1	0	29.4	21.7
26	1	1984	30.71		0.3	1	29.4	22.2
27	1	1984	11.69		2.2	1	25.6	20.6
28	1	1984	34.71		0.8	3	32.2	21.1
29	1	1984	31.72		0.9	3	32.2	21.1
30	1	1984	39.03		0.3	3	31.7	22.8
31	1	1984	33.03		0.6	4	32.2	22.2
1	2	1984	43.89		0.0	3	32.2	21.7
2	2	1984	27.43		1.3	3	31.7	22.2
3	2	1984	19.21		1.3	3	31.1	22.2
4	2	1984	30.97		1.2	2	32.8	22.2
5	2	1984	13.42		1.2	2	32.8	22.2
6	2	1984	34.18		0.6	2	32.2	22.2
7	2	1984	33.83		0.0	3	32.8	22.8
8	2	1984	24.10		1.1	0	30.6	22.2
9	2	1984	23.14		1.1	1	31.1	22.8
10	2	1984	18.84		0.6	2	30.0	21.7
11	2	1984	24.91		1.1	0	32.8	21.1
12	2	1984	26.66		1.2	0	32.8	21.1
13	2	1984	30.18		0.4	0	31.7	21.7
14	2	1984	33.90		2.4	2	33.3	22.8
15	2	1984	27.43		0.3	1	32.2	21.1
16	2	1984	36.39		0.0	4	32.2	22.2
17	2	1984	33.69		0.0	4	30.6	22.8
18	2	1984	27.39		1.2	8	32.2	22.2

TABLE 1
Daily Weather Measurements. Bogor, Indonesia, Cycle I

DATE			SOLAR RADIATION		RAIN	MEAN WIND	AIR TEMP MAX.	AIR TEMP MIN.
DAY	MONTH	YEAR	E/m2/d	cal/cm2/d	cm/d	km/hr	deg C	deg C
XX	XX	XXXX	XX.XX	XXXXXX	XX.X	XX	XX.X	XX.X
19	2	1984	42.27		1.3	8	32.2	22.2
20	2	1984	18.38		1.0	2	31.1	21.1
21	2	1984	20.86		1.5	2	31.1	21.1
22	2	1984	30.13		1.3	2	30.6	22.8
23	2	1984	35.57		0.0	3	32.2	22.2
24	2	1984	34.22		3.8	2	31.1	21.1
25	2	1984	33.43		0.4	3	33.3	21.7
26	2	1984	37.17		0.4	3	33.3	21.7
27	2	1984	40.90		0.3	2	33.3	22.8
28	2	1984	31.60		8.1	1	30.6	21.1
29	2	1984	12.95		1.3	0	32.2	22.2
1	3	1984	26.82		0.0	2	31.1	22.2
2	3	1984	28.09		0.6	2	31.7	22.2
3	3	1984	31.05		3.1	4	32.2	22.8
4	3	1984	19.01		3.1	4	32.2	22.8
5	3	1984	27.84		1.6	2	31.1	22.2
6	3	1984	24.53		0.0	1	27.8	23.9
7	3	1984	26.87		0.3	1	29.4	22.8
8	3	1984	19.51		2.7	1	28.3	21.7
9	3	1984	16.83		1.3	0	32.8	21.1
10	3	1984	18.44		2.6	5	31.7	21.7
11	3	1984	26.62		2.6	5	31.7	21.7
12	3	1984	29.25		0.3	8	29.4	25.0
13	3	1984	32.01		0.8	1	31.7	22.8
14	3	1984	18.60		0.8	1	36.7	25.6
15	3	1984	42.02		0.0	1	31.7	22.8
16	3	1984	29.54		1.3	1	32.2	25.6
17	3	1984	38.72		1.9	4	36.7	22.2
18	3	1984	18.20		1.9	4	36.7	22.2
19	3	1984	25.34		0.6	3	36.1	24.4
20	3	1984	40.91		0.0	2	36.7	25.0
21	3	1984	35.74		0.0	2	36.7	25.0
22	3	1984	34.53		0.0	2	36.7	22.2
23	3	1984	39.83		1.5	1	36.7	22.2
24	3	1984	32.57		0.0	1	36.1	22.2
25	3	1984	44.29		0.0	3	32.2	22.2
26	3	1984	43.71		0.0	2	32.2	22.2
27	3	1984	37.44		0.0	2	30.6	22.8
28	3	1984	22.55		2.7	1	31.7	22.8
29	3	1984	32.96		0.4	1	32.2	22.8
30	3	1984	23.14		5.7	0	32.2	22.2
31	3	1984	42.61					
1	4	1984	36.93		0.0	1	27.2	21.7
2	4	1984	29.13		2.5	3	27.8	22.2
3	4	1984	33.78		2.3	2	27.2	22.2
4	4	1984	33.65		5.2	0	32.8	21.1
5	4	1984	39.03		1.0	2	32.8	21.7
6	4	1984	35.11		0.0	1	32.8	22.2
7	4	1984	26.64		0.0	1	32.8	21.7

TABLE 1

Daily Weather Measurements. Bogor, Indonesia, Cycle I

DATE			SOLAR RADIATION		RAIN	MEAN WIND	AIR TEMP MAX.	MIN.
DAY	MONTH	YEAR	E/m2/d	cal/cm2/d	cm/d	km/hr	deg C	deg C
XX	XX	XXXX	XX.XX	XXXXXX	XX.X	XX	XX.X	XX.X
8	4	1984	28.33		8.0	1	32.8	21.1
9	4	1984	36.19		1.3	2	32.2	21.7
10	4	1984	27.96		0.4	1	32.2	22.2
11	4	1984	24.03		4.6	3	31.1	23.3
12	4	1984	21.75		2.7	1	32.2	22.2
13	4	1984	24.43		1.7	1	31.1	22.2
14	4	1984	25.92		6.4	1	33.3	22.2
15	4	1984	32.82		0.4	1	32.2	23.3
16	4	1984	23.74		2.5	1	31.1	23.3
17	4	1984	23.26		0.6	1	30.6	23.3
18	4	1984	29.29		2.3	1	32.2	22.8
19	4	1984	39.03		0.0	2	33.3	22.2
20	4	1984	27.25		0.0	1	33.3	21.1
21	4	1984	33.45		10.4	2	32.2	21.1
22	4	1984	25.62		4.1	2	32.2	22.2
23	4	1984	28.05		1.7	1	32.8	22.8
24	4	1984	28.57		0.3	1	31.1	22.8
25	4	1984	23.01		0.8	1	31.1	22.8
26	4	1984	30.95		0.0	0	31.1	22.2
27	4	1984	19.52		2.7	0	31.1	22.2
28	4	1984	33.84		3.2	2	32.2	21.1
29	4	1984	30.57		3.1	1	32.2	21.1
30	4	1984	30.00		0.3	1	32.2	21.1
1	5	1984	18.50		1.5	1	32.2	22.8
2	5	1984	37.21		3.4	0	30.0	22.2
3	5	1984	21.83		0.0	0	32.8	23.3
4	5	1984	20.31		2.5	0	32.2	22.2
5	5	1984	37.04		3.2	2	32.2	21.1
6	5	1984	32.11		2.2	1	32.2	21.7
7	5	1984	30.78		0.0	1	31.1	22.8
8	5	1984	27.20		0.0	2	32.2	22.2
9	5	1984	21.85		3.4	1	32.2	22.2
10	5	1984	27.49		0.9	1	32.2	23.3
11	5	1984	22.71		2.7	1	31.1	22.8
12	5	1984	18.05		1.1	1	32.2	21.1
13	5	1984	30.43		2.1	1	32.2	21.1
14	5	1984	34.13		0.9	1	32.2	21.1
15	5	1984	22.03		3.1	1	32.2	21.7
16	5	1984	19.76		0.6	0	30.0	22.8
17	5	1984	23.71		0.0	1	31.1	22.8
18	5	1984	33.43		0.0	2	32.2	22.8
19	5	1984	27.74		0.0	2	32.2	22.8
20	5	1984	25.24		6.4	1	33.3	21.7
21	5	1984	26.63		2.5	1	31.1	22.2
22	5	1984	26.24		0.0	1	31.1	22.2
23	5	1984	34.91		0.0	2	31.1	22.8
24	5	1984	26.37		7.4	2	31.7	22.2
25	5	1984	26.86		0.0	1	31.1	22.2
26	5	1984	34.00		2.0	2	32.2	22.2

TABLE 1

Daily Weather Measurements. Bogor, Indonesia, Cycle I

DATE			SOLAR RADIATION		RAIN	MEAN WIND	AIR TEMP MAX.	AIR TEMP MIN.
DAY	MONTH	YEAR	E/m2/d	cal/cm2/d	cm/d	km/hr	deg C	deg C
XX	XX	XXXX	XX.XX	XXXXXX	XX.X	XX	XX.X	XX.X
27	5	1984	25.65		2.2	2	32.2	22.2
28	5	1984	26.03		0.0	0	32.2	22.2
29	5	1984	29.68		0.0	1	31.7	22.2
30	5	1984	33.36		0.0	2	32.2	23.3
31	5	1984	29.06		4.7	1	32.2	22.8
1	6	1984	14.91		4.8	0	30.6	21.7
2	6	1984	25.58		0.0	0	31.1	21.7
3	6	1984	30.23		1.3	2	31.1	21.7
4	6	1984	33.31		0.0	2	31.7	22.8
5	6	1984	20.90		1.8	1	31.1	22.8
6	6	1984	32.59		2.7	1	32.2	22.8
7	6	1984	30.14		0.0	1	31.7	21.7
8	6	1984	31.08		0.0	1	31.1	21.7
9	6	1984	24.82		0.0	1	31.1	22.2
10	6	1984	17.11		1.3	1	31.1	22.2
11	6	1984	23.49		0.0	1	31.1	22.2
12	6	1984	30.89		0.4	2	31.7	21.7
13	6	1984	35.95		0.0	2	31.7	22.2
14	6	1984	24.06		7.2	1	32.2	21.7
15	6	1984	32.58		1.0	1	32.2	21.1
16	6	1984	32.56		0.0	2	32.2	21.1
17	6	1984	33.77		1.0	1	32.2	21.1
18	6	1984	32.33		0.0	2	31.7	22.2
19	6	1984	30.87		0.0	1	32.2	23.3
20	6	1984	24.11		0.5	1	32.2	22.2
21	6	1984	33.03		0.0	3	30.6	21.7
22	6	1984	28.19		0.0	1	31.7	22.8
23	6	1984	31.62		0.0	2	31.7	21.7
24	6	1984	32.32		0.0	1	31.7	21.7
25	6	1984	23.97		0.0	3	31.1	22.2
26	6	1984	27.97		0.0	2	31.7	20.6
27	6	1984	33.31		0.0	2	31.7	19.4
28	6	1984	35.17		0.0	2	30.6	20.0
29	6	1984	31.79		0.0	1	30.6	21.7
30	6	1984	33.76		0.0	1	31.1	22.2
1	7	1984	28.10		2.2	1	32.2	20.0
2	7	1984	32.47		1.5	0	32.2	21.1
3	7	1984	25.46		0.0	0	32.2	21.1
4	7	1984	14.99		0.0	0	32.2	21.1
5	7	1984	25.06		0.0	1	32.2	22.2
6	7	1984	33.27		5.2	0	32.2	20.0
7	7	1984	20.78		0.0	1	32.2	21.1
8	7	1984	32.49		0.6	1	32.2	21.1
9	7	1984	32.63		0.0	1	32.2	21.1
10	7	1984	32.74		0.0	1	32.2	21.7
11	7	1984	24.08		0.6	1	32.2	22.2
12	7	1984	29.40		0.0	2	32.2	21.7
13	7	1984	30.09		0.0	1	31.7	22.2
14	7	1984	33.30		0.0	2	31.7	21.1

TABLE 1

Daily Weather Measurements. Bogor, Indonesia, Cycle I

DATE			SOLAR RADIATION		RAIN	MEAN WIND	AIR TEMP MAX.	AIR TEMP MIN.
DAY	MONTH	YEAR	E/m2/d	cal/cm2/d	cm/d	km/hr	deg C	deg C
XX	XX	XXXX	XX.XX	XXXXXX	XX.X	XX	XX.X	XX.X
15	7	1984	32.97		0.0	1	31.7	21.1
16	7	1984	30.10		0.0	1	31.7	22.8
17	7	1984	21.92		9.5	0	31.1	21.1
18	7	1984	24.49		0.9	1	31.7	22.2
19	7	1984	24.02		2.5	1	30.6	22.2
20	7	1984	27.29		0.0	5	29.4	22.2
21	7	1984	18.89		0.0	1	31.7	22.2
22	7	1984	31.28		0.0	0	31.7	22.1
23	7	1984	26.92		2.3	1	31.7	21.7
24	7	1984	28.04		0.4	1	31.1	22.8
25	7	1984	25.99		0.0	4	31.7	22.8
26	7	1984	21.17		4.6	4	30.6	21.1
27	7	1984	36.41		0.0	3	31.7	21.1
28	7	1984	27.87		1.3	4	31.1	22.2
29	7	1984	29.36		2.0	2	31.1	22.2
30	7	1984	33.00		0.0	4	32.2	23.3
31	7	1984	34.36		0.0	3	32.2	22.8
1	8	1984	33.24		0.0	3	32.2	22.8
2	8	1984	26.28		0.0	6	30.6	22.2
3	8	1984	25.88		0.0	5	30.6	21.7
4	8	1984	36.33		0.0	4	32.2	20.6
5	8	1984	32.44		0.0	4	32.2	20.6
6	8	1984	32.01		0.0	7	31.7	21.7
7	8	1984	37.06		0.0	4	32.2	21.7
8	8	1984	34.28		0.0	4	32.2	21.7
9	8	1984	31.48		0.0	3	32.8	22.8
10	8	1984	32.25		0.0	9	32.2	21.1
11	8	1984	30.06		0.0	1	32.8	21.1
12	8	1984	24.76		9.8	4	32.2	21.7
13	8	1984	21.76		0.0	2	31.7	22.2
14	8	1984	24.33		1.0	3	31.1	22.2
15	8	1984	32.13		8.4	3	32.2	21.1
16	8	1984	32.16		0.0	2	32.8	22.2
17	8	1984	34.91		0.0	2	32.2	22.2
18	8	1984	30.63		0.0	2	32.2	21.7
19	8	1984	28.41		4.5	4	32.2	21.1
20	8	1984	30.84		0.0	2	32.2	21.1
21	8	1984	34.16		0.1	2	32.2	21.7
22	8	1984	24.89		0.0	3	32.2	21.1
23	8	1984	36.02		0.8	1	32.2	22.8
24	8	1984	21.25		6.0	3	31.1	22.2
25	8	1984	23.22		0.0	2	31.1	21.1
26	8	1984	31.28		2.7	3	31.1	21.1
27	8	1984	30.10		3.9	2	31.1	22.2
28	8	1984	16.78		1.9	2	32.2	22.8
29	8	1984	29.06		0.0	2	26.7	22.2
30	8	1984	28.32		7.6	3	31.1	22.2
31	8	1984	32.65		0.0	3	31.1	21.1
1	9	1984			0.0	3	31.1	21.7

TABLE 1

Daily Weather Measurements. Bogor, Indonesia, Cycle I

DATE			SOLAR RADIATION		RAIN	MEAN WIND	AIR TEMP MAX.	MIN.
DAY	MONTH	YEAR	E/m2/d	cal/cm2/d	cm/d	km/hr	deg C	deg C
XX	XX	XXXX	XX.XX	XXXXXX	XX.X	XX	XX.X	XX.X
2	9	1984	35.55		1.3	3	28.9	21.7
3	9	1984	30.79		3.8	3	32.2	21.1
4	9	1984			0.0	3	31.1	21.7
5	9	1984			1.0	2	32.2	22.2
6	9	1984			5.7	3	30.6	21.7
7	9	1984	21.87		1.0	3	31.7	20.6
8	9	1984	28.20		1.0	2	31.7	21.1
9	9	1984	21.76		2.3	4	32.2	21.7
10	9	1984	20.95		1.0	2	30.0	21.7
11	9	1984			1.5	5	32.2	20.0
12	9	1984			0.0	4	32.2	21.1
13	9	1984	31.12		0.4	8	31.1	21.7
14	9	1984			0.5	4	32.2	21.1
15	9	1984	20.49		0.0	4	32.2	21.1
16	9	1984	25.29		4.5	4	32.2	21.1
17	9	1984	28.71		0.0	4	32.2	21.7
18	9	1984	24.18		2.2	3	31.1	21.7
19	9	1984	23.49		0.0	3	32.8	21.1
20	9	1984	38.83		0.0	3	35.0	21.7
21	9	1984	30.97		0.3	3	35.0	22.8
22	9	1984	20.66		0.0	4	32.8	22.2
23	9	1984	24.34		1.5	8	32.8	22.2
24	9	1984	34.18		1.8	4	33.3	22.8
25	9	1984	31.59		4.5	4	33.3	22.2
26	9	1984	29.07		4.4	4	33.3	22.2
27	9	1984	30.30		0.0	4	34.4	21.1
28	9	1984	32.73		0.6	4	35.6	22.2
29	9	1984	23.15		0.0	5	34.4	22.8
30	9	1984	28.89		0.0	4	34.4	22.8
1	10	1984	15.84		2.5	3	34.4	22.8
2	10	1984	22.54		0.0	4	34.3	22.8
3	10	1984	27.02		2.0	3	34.4	22.8
4	10	1984	31.15		0.0	5	33.3	21.7
5	10	1984	29.25		0.0	6	33.3	22.2
6	10	1984	32.19		0.0	5	33.3	21.1
7	10	1984	39.94		0.0	4	33.3	21.1
8	10	1984	34.24		0.0	5	33.3	21.1
9	10	1984	33.80		0.0	5	33.3	21.1
10	10	1984	14.58		0.0	4	33.3	21.1
11	10	1984	26.96		1.3	5	35.6	21.7
12	10	1984	29.68		0.5	4	33.3	22.8
13	10	1984	33.16		0.0	3	34.4	22.2
14	10	1984	39.85		0.0	3	34.4	22.2
15	10	1984	35.87		0.1	4	34.4	23.3
16	10	1984	22.88		1.3	4	31.1	22.8
17	10	1984	34.12		1.1	7	35.0	22.8
18	10	1984	33.54		2.7	5	35.0	21.1
19	10	1984	32.56		0.1	8	32.8	22.8
20	10	1984	39.90		2.5	5	36.7	21.1

TABLE 1

Daily Weather Measurements. Bogor, Indonesia, Cycle I

DATE			SOLAR RADIATION		RAIN	MEAN WIND	AIR TEMP MAX.	AIR TEMP MIN.
DAY	MONTH	YEAR	E/m2/d	cal/cm2/d	cm/d	km/hr	deg C	deg C
XX	XX	XXXX	XX.XX	XXXXXX	XX.X	XX	XX.X	XX.X
21	10	1984	34.33		2.0	4	36.7	21.1
22	10	1984	35.65		0.0	4	36.1	21.1
23	10	1984	28.60		0.8	5	33.3	23.3
24	10	1984	37.80		0.0	6	31.7	23.9
25	10	1984	23.57		0.0	5	32.8	22.2
26	10	1984	30.08		1.9	4	34.4	22.2
27	10	1984	36.12		0.0	5	35.6	21.1
28	10	1984	23.60		5.7	4	35.6	21.1
29	10	1984	35.46		0.0	4	35.6	22.2
30	10	1984	26.21		0.0	4	34.4	21.7
31	10	1984	26.11		5.3	3	32.8	22.8
1	11	1984	31.95		0.0	2	33.9	22.2
2	11	1984	31.08		3.6	1	33.9	22.2
3	11	1984	32.96		0.0	3	35.6	22.8
4	11	1984	31.30		0.0	4	35.6	22.8
5	11	1984	41.15		0.0	3	36.1	21.7
6	11	1984	26.03		10.2	5	36.1	21.1
7	11	1984	35.22		9.5	4	34.4	20.0
8	11	1984	23.93		1.0	4	31.1	21.1
9	11	1984	15.86		0.3	4	30.6	21.7
10	11	1984	32.35		0.0	3	31.7	22.2
11	11	1984	33.03		1.7	3	31.7	22.2
12	11	1984	35.82		2.3	4	36.7	20.0
13	11	1984			1.3	4	35.6	22.2
14	11	1984			0.5	3	29.4	22.2

Daily Pond Measurements. Bogor, Indonesia, Cycle I, Dry Season

DATE			POND	POND DEPTH
DAY	MONTH	YEAR		m
XX	XX	XXXX		X.XX
11	6	1984	C2	0.76
11	6	1984	C3	0.84
11	6	1984	C4	0.90
11	6	1984	C5	0.88
11	6	1984	C6	0.50
11	6	1984	C7	0.86
11	6	1984	C8	0.74
11	6	1984	C9	0.86
11	6	1984	D5	0.98
11	6	1984	D6	0.68
11	6	1984	D7	0.68
12	6	1984	C2	0.64
12	6	1984	C3	0.70
12	6	1984	C4	0.66
12	6	1984	C5	0.70
12	6	1984	C6	0.42
12	6	1984	C7	0.56
12	6	1984	C8	0.49
12	6	1984	C9	0.84
12	6	1984	D5	0.96
12	6	1984	D6	0.64
12	6	1984	D7	0.70
13	6	1984	C2	0.80
13	6	1984	C3	0.82
13	6	1984	C4	0.72
13	6	1984	C5	0.88
13	6	1984	C6	0.77
13	6	1984	C7	0.75
13	6	1984	C8	0.78
13	6	1984	C9	0.97
13	6	1984	D5	0.97
13	6	1984	D6	0.96
13	6	1984	D7	0.96
14	6	1984	C2	0.72
14	6	1984	C3	0.84
14	6	1984	C4	0.82
14	6	1984	C5	0.88
14	6	1984	C6	0.78
14	6	1984	C7	0.89
14	6	1984	C8	0.88
14	6	1984	C9	0.96
14	6	1984	D5	0.88
14	6	1984	D6	1.00
14	6	1984	D7	0.97
15	6	1984	C2	0.88
15	6	1984	C3	0.88
15	6	1984	C4	0.83
15	6	1984	C5	0.91
15	6	1984	C6	0.74
15	6	1984	C7	0.90
15	6	1984	C8	0.90
15	6	1984	C9	0.98
15	6	1984	D5	0.89
15	6	1984	D6	1.00
15	6	1984	D7	0.98
16	6	1984	C2	0.78
16	6	1984	C3	0.82
16	6	1984	C4	0.82
16	6	1984	C5	0.86
16	6	1984	C6	0.73
16	6	1984	C7	0.86
16	6	1984	C8	0.74
16	6	1984	C9	0.96
16	6	1984	D5	0.83
16	6	1984	D6	1.10
16	6	1984	D7	0.93
17	6	1984	C2	0.73
17	6	1984	C3	0.78
17	6	1984	C4	0.82
17	6	1984	C5	0.90
17	6	1984	C6	0.76
17	6	1984	C7	0.84
17	6	1984	C8	0.92
17	6	1984	C9	0.94
17	6	1984	D5	0.98
17	6	1984	D6	0.96
17	6	1984	D7	0.78
18	6	1984	C2	0.88
18	6	1984	C3	0.88
18	6	1984	C4	0.83
18	6	1984	C5	0.86
18	6	1984	C6	0.82
18	6	1984	C7	0.81
18	6	1984	C8	0.72
18	6	1984	C9	0.92
18	6	1984	D5	0.97
18	6	1984	D6	0.90
18	6	1984	D7	0.74
19	6	1984	C2	0.78
19	6	1984	C3	0.80
19	6	1984	C4	0.74
19	6	1984	C5	0.85
19	6	1984	C6	0.69
19	6	1984	C7	0.80
19	6	1984	C8	0.70
19	6	1984	C9	0.92
19	6	1984	D5	0.98
19	6	1984	D6	0.84
19	6	1984	D7	0.73
20	6	1984	C2	0.76
20	6	1984	C3	0.82
20	6	1984	C4	0.90
20	6	1984	C5	0.92
20	6	1984	C6	0.80
20	6	1984	C7	0.90
20	6	1984	C8	0.96
20	6	1984	C9	0.94
20	6	1984	D5	0.98
20	6	1984	D6	0.88
20	6	1984	D7	0.99
21	6	1984	C2	0.72
21	6	1984	C3	0.77
21	6	1984	C4	0.89
21	6	1984	C5	0.81
21	6	1984	C6	0.83
21	6	1984	C7	0.75
21	6	1984	C8	0.93
21	6	1984	C9	0.94
21	6	1984	D5	0.96
21	6	1984	D6	0.93
21	6	1984	D7	0.90
22	6	1984	C2	0.70
22	6	1984	C3	0.72
22	6	1984	C4	0.88
22	6	1984	C5	0.79
22	6	1984	C6	0.88
22	6	1984	C7	0.60
22	6	1984	C8	0.90
22	6	1984	C9	0.93
22	6	1984	D5	0.93
22	6	1984	D6	0.80
22	6	1984	D7	0.83
23	6	1984	C2	0.78
23	6	1984	C3	0.80
23	6	1984	C4	0.72
23	6	1984	C5	0.84
23	6	1984	C6	0.68
23	6	1984	C7	0.75
23	6	1984	C8	0.71
23	6	1984	C9	0.88
23	6	1984	D5	0.95
23	6	1984	D6	0.74
23	6	1984	D7	0.80
26	6	1984	C2	0.68
26	6	1984	C3	0.73
26	6	1984	C4	0.60
26	6	1984	C5	0.76

TABLE 2

Daily Pond Measurements. Bogor, Indonesia, Cycle I, Dry Season

DATE			POND	POND DEPTH
DAY	MONTH	YEAR		m
XX	XX	XXXX		X.XX
26	6	1984	C6	0.56
26	6	1984	C7	0.62
26	6	1984	C8	0.51
26	6	1984	C9	0.84
26	6	1984	D5	0.80
26	6	1984	D6	0.71
26	6	1984	D7	0.71
27	6	1984	C2	0.68
27	6	1984	C3	0.70
27	6	1984	C4	0.50
27	6	1984	C5	0.72
27	6	1984	C6	0.54
27	6	1984	C7	0.56
27	6	1984	C8	0.50
27	6	1984	C9	0.82
27	6	1984	D5	0.94
27	6	1984	D6	0.68
27	6	1984	D7	0.68
4	7	1984	C2	0.92
4	7	1984	C3	0.88
4	7	1984	C4	0.92
4	7	1984	C5	0.93
4	7	1984	C6	0.93
4	7	1984	C7	0.96
4	7	1984	C8	0.95
4	7	1984	C9	0.98
4	7	1984	D5	0.97
4	7	1984	D6	1.05
4	7	1984	D7	0.96
5	7	1984	C2	0.90
5	7	1984	C3	0.88
5	7	1984	C4	0.86
5	7	1984	C5	0.90
5	7	1984	C6	0.90
5	7	1984	C7	0.94
5	7	1984	C8	0.96
5	7	1984	C9	1.00
5	7	1984	D5	0.98
5	7	1984	D6	1.00
5	7	1984	D7	0.96
6	7	1984	C2	0.85
6	7	1984	C3	0.82
6	7	1984	C4	0.90
6	7	1984	C5	0.90
6	7	1984	C6	0.90
6	7	1984	C7	0.94
6	7	1984	C8	0.90
6	7	1984	C9	0.98
6	7	1984	D5	0.98
6	7	1984	D6	0.92
6	7	1984	D7	0.94
7	7	1984	C2	0.86
7	7	1984	C3	0.81
7	7	1984	C4	0.92
7	7	1984	C5	0.96
7	7	1984	C6	0.90
7	7	1984	C7	0.92
7	7	1984	C8	0.88
7	7	1984	C9	0.98
7	7	1984	D5	0.98
7	7	1984	D6	0.90
7	7	1984	D7	0.92
8	7	1984	C2	0.86
8	7	1984	C3	0.86
8	7	1984	C4	0.78
8	7	1984	C5	0.90
8	7	1984	C6	0.82
8	7	1984	C7	0.90
8	7	1984	C8	0.86
8	7	1984	C9	0.98
8	7	1984	D5	1.00
8	7	1984	D6	0.86
8	7	1984	D7	0.94
9	7	1984	C2	0.79
9	7	1984	C3	0.82
9	7	1984	C4	0.74
9	7	1984	C5	0.87
9	7	1984	C6	0.76
9	7	1984	C7	0.86
9	7	1984	C8	0.79
9	7	1984	C9	0.94
9	7	1984	D5	0.99
9	7	1984	D6	1.00
9	7	1984	D7	0.96
10	7	1984	C2	0.71
10	7	1984	C3	0.78
10	7	1984	C4	0.70
10	7	1984	C5	0.88
10	7	1984	C6	0.69
10	7	1984	C7	0.78
10	7	1984	C8	0.66
10	7	1984	C9	0.89
10	7	1984	D5	0.99
10	7	1984	D6	1.00
10	7	1984	D7	0.94
11	7	1984	C2	0.68
11	7	1984	C3	0.75
11	7	1984	C4	0.80
11	7	1984	C5	0.92
11	7	1984	C6	0.68
11	7	1984	C7	0.80
11	7	1984	C8	0.89
11	7	1984	C9	0.84
11	7	1984	D5	0.98
11	7	1984	D6	0.94
11	7	1984	D7	0.92
12	7	1984	C2	0.88
12	7	1984	C3	0.88
12	7	1984	C4	0.86
12	7	1984	C5	0.92
12	7	1984	C6	0.90
12	7	1984	C7	0.92
12	7	1984	C8	0.84
12	7	1984	C9	0.98
12	7	1984	D5	1.00
12	7	1984	D6	1.00
12	7	1984	D7	0.96
13	7	1984	C2	0.82
13	7	1984	C3	0.80
13	7	1984	C4	0.82
13	7	1984	C5	0.90
13	7	1984	C6	0.82
13	7	1984	C7	0.90
13	7	1984	C8	0.72
13	7	1984	C9	0.94
13	7	1984	D5	0.98
13	7	1984	D6	0.94
13	7	1984	D7	0.94
14	7	1984	C2	0.80
14	7	1984	C3	0.80
14	7	1984	C4	0.76
14	7	1984	C5	0.86
14	7	1984	C6	0.78
14	7	1984	C7	0.88
14	7	1984	C8	0.74
14	7	1984	C9	0.88
14	7	1984	D5	0.98
14	7	1984	D6	0.88
14	7	1984	D7	0.92
15	7	1984	C2	0.80
15	7	1984	C3	0.78
15	7	1984	C4	0.92
15	7	1984	C5	0.96
15	7	1984	C6	0.76
15	7	1984	C7	0.90
15	7	1984	C8	0.88
15	7	1984	C9	0.92

TABLE 2

Daily Pond Measurements. Bogor, Indonesia, Cycle I, Dry Season

DATE			POND	POND DEPTH
DAY	MONTH	YEAR		m
XX	XX	XXXX		X.XX
15	7	1984	D5	0.98
15	7	1984	D6	0.82
15	7	1984	D7	0.90
16	7	1984	C2	0.82
16	7	1984	C3	0.84
16	7	1984	C4	0.84
16	7	1984	C5	0.94
16	7	1984	C6	0.76
16	7	1984	C7	0.86
16	7	1984	C8	0.90
16	7	1984	C9	0.98
16	7	1984	D5	0.98
16	7	1984	D6	0.76
16	7	1984	D7	0.89
17	7	1984	C2	0.78
17	7	1984	C3	0.79
17	7	1984	C4	0.77
17	7	1984	C5	0.86
17	7	1984	C6	0.68
17	7	1984	C7	0.76
17	7	1984	C8	0.72
17	7	1984	C9	0.84
17	7	1984	D5	0.98
17	7	1984	D6	0.70
17	7	1984	D7	0.87
18	7	1984	C2	0.84
18	7	1984	C3	0.87
18	7	1984	C4	0.90
18	7	1984	C5	0.92
18	7	1984	C6	0.76
18	7	1984	C7	0.89
18	7	1984	C8	0.86
18	7	1984	C9	0.94
18	7	1984	D5	0.99
18	7	1984	D6	0.82
18	7	1984	D7	0.96
19	7	1984	C2	0.81
19	7	1984	C3	0.80
19	7	1984	C4	0.85
19	7	1984	C5	0.99
19	7	1984	C6	0.70
19	7	1984	C7	0.80
19	7	1984	C8	0.83
19	7	1984	C9	0.90
19	7	1984	D5	0.99
19	7	1984	D6	1.00
19	7	1984	D7	0.87
20	7	1984	C2	0.90
20	7	1984	C3	0.90
20	7	1984	C4	0.90
20	7	1984	C5	0.94
20	7	1984	C6	0.82
20	7	1984	C7	0.92
20	7	1984	C8	0.88
20	7	1984	C9	0.98
20	7	1984	D5	0.98
20	7	1984	D6	1.00
20	7	1984	D7	0.94
21	7	1984	C2	0.90
21	7	1984	C3	0.90
21	7	1984	C4	0.94
21	7	1984	C5	0.94
21	7	1984	C6	0.88
21	7	1984	C7	0.94
21	7	1984	C8	0.86
21	7	1984	C9	0.98
21	7	1984	D5	0.98
21	7	1984	D6	1.00
21	7	1984	D7	0.92
22	7	1984	C2	0.84
22	7	1984	C3	0.84
22	7	1984	C4	0.86
22	7	1984	C5	0.88
22	7	1984	C6	0.86
22	7	1984	C7	0.90
22	7	1984	C8	0.74
22	7	1984	C9	0.94
22	7	1984	D5	0.98
22	7	1984	D6	0.96
22	7	1984	D7	0.90
23	7	1984	C2	0.83
23	7	1984	C3	0.84
23	7	1984	C4	0.88
23	7	1984	C5	0.92
23	7	1984	C6	0.94
23	7	1984	C7	0.96
23	7	1984	C8	0.98
23	7	1984	C9	0.94
23	7	1984	D5	0.97
23	7	1984	D6	0.88
23	7	1984	D7	0.89
24	7	1984	C2	0.86
24	7	1984	C3	0.86
24	7	1984	C4	0.93
24	7	1984	C5	0.93
24	7	1984	C6	0.90
24	7	1984	C7	0.91
24	7	1984	C8	0.96
24	7	1984	C9	0.94
24	7	1984	D5	0.98
24	7	1984	D6	0.98
24	7	1984	D7	0.96
25	7	1984	C2	0.85
25	7	1984	C3	0.86
25	7	1984	C4	0.94
25	7	1984	C5	0.95
25	7	1984	C6	0.93
25	7	1984	C7	0.93
25	7	1984	C8	0.92
25	7	1984	C9	1.00
25	7	1984	D5	0.98
25	7	1984	D6	0.98
25	7	1984	D7	0.96
26	7	1984	C2	0.80
26	7	1984	C3	0.82
26	7	1984	C4	0.84
26	7	1984	C5	0.88
26	7	1984	C6	0.89
26	7	1984	C7	0.93
26	7	1984	C8	0.90
26	7	1984	C9	0.95
26	7	1984	D5	0.99
26	7	1984	D6	0.90
26	7	1984	D7	0.93
27	7	1984	C2	0.81
27	7	1984	C3	0.82
27	7	1984	C4	0.95
27	7	1984	C5	0.96
27	7	1984	C6	0.99
27	7	1984	C7	1.00
27	7	1984	C8	0.90
27	7	1984	C9	0.99
27	7	1984	D5	0.99
27	7	1984	D6	1.00
27	7	1984	D7	0.94
28	7	1984	C2	0.79
28	7	1984	C3	0.82
28	7	1984	C4	0.93
28	7	1984	C5	0.94
28	7	1984	C6	0.99
28	7	1984	C7	0.97
28	7	1984	C8	0.86
28	7	1984	C9	0.97
28	7	1984	D5	0.99
28	7	1984	D6	0.96
28	7	1984	D7	0.93
29	7	1984	C2	0.83

TABLE 2

Daily Pond Measurements. Bogor, Indonesia, Cycle I, Dry Season

DATE			POND	POND DEPTH
DAY	MONTH	YEAR		m
XX	XX	XXXX		X.XX
29	7	1984	C3	0.83
29	7	1984	C4	0.89
29	7	1984	C5	0.90
29	7	1984	C6	0.85
29	7	1984	C7	0.89
29	7	1984	C8	0.85
29	7	1984	C9	0.98
29	7	1984	D5	0.98
29	7	1984	D6	1.00
29	7	1984	D7	0.95
30	7	1984	C2	0.88
30	7	1984	C3	0.88
30	7	1984	C4	0.84
30	7	1984	C5	0.90
30	7	1984	C6	0.82
30	7	1984	C7	0.92
30	7	1984	C8	0.82
30	7	1984	C9	0.98
30	7	1984	D5	0.99
30	7	1984	D6	0.95
30	7	1984	D7	0.95
31	7	1984	C2	0.85
31	7	1984	C3	0.85
31	7	1984	C4	0.81
31	7	1984	C5	0.94
31	7	1984	C6	0.98
31	7	1984	C7	1.00
31	7	1984	C8	0.98
31	7	1984	C9	0.99
31	7	1984	D5	0.98
31	7	1984	D6	0.88
31	7	1984	D7	0.94
1	8	1984	C2	0.82
1	8	1984	C3	0.84
1	8	1984	C4	0.96
1	8	1984	C5	0.90
1	8	1984	C6	0.96
1	8	1984	C7	0.96
1	8	1984	C8	0.94
1	8	1984	C9	0.99
1	8	1984	D5	0.99
1	8	1984	D6	0.82
1	8	1984	D7	0.93
2	8	1984	C2	0.80
2	8	1984	C3	0.79
2	8	1984	C4	0.92
2	8	1984	C5	0.92
2	8	1984	C6	0.80
2	8	1984	C7	0.90
2	8	1984	C8	0.85
2	8	1984	C9	0.99
2	8	1984	D5	0.99
2	8	1984	D6	0.82
2	8	1984	D7	0.90
3	8	1984	C2	0.85
3	8	1984	C3	0.89
3	8	1984	C4	0.84
3	8	1984	C5	0.93
3	8	1984	C6	0.72
3	8	1984	C7	0.88
3	8	1984	C8	0.92
3	8	1984	C9	0.99
3	8	1984	D5	0.99
3	8	1984	D6	0.82
3	8	1984	D7	0.90
4	8	1984	C2	0.78
4	8	1984	C3	0.84
4	8	1984	C4	0.98
4	8	1984	C5	0.96
4	8	1984	C6	0.86
4	8	1984	C7	0.95
4	8	1984	C8	0.99
4	8	1984	C9	1.00
4	8	1984	D5	0.99
4	8	1984	D6	0.83
4	8	1984	D7	0.91
5	8	1984	C2	0.86
5	8	1984	C3	0.86
5	8	1984	C4	0.96
5	8	1984	C5	0.96
5	8	1984	C6	0.80
5	8	1984	C7	0.95
5	8	1984	C8	0.92
5	8	1984	C9	0.98
5	8	1984	D5	0.98
5	8	1984	D6	0.95
5	8	1984	D7	0.88
6	8	1984	C2	0.86
6	8	1984	C3	0.86
6	8	1984	C4	0.96
6	8	1984	C5	0.96
6	8	1984	C6	0.80
6	8	1984	C7	0.95
6	8	1984	C8	0.92
6	8	1984	C9	0.98
6	8	1984	D5	0.98
6	8	1984	D6	0.95
6	8	1984	D7	0.88
7	8	1984	C2	0.83
7	8	1984	C3	0.83
7	8	1984	C4	0.94
7	8	1984	C5	0.95
7	8	1984	C6	0.97
7	8	1984	C7	0.98
7	8	1984	C8	0.90
7	8	1984	C9	0.97
7	8	1984	D5	0.98
7	8	1984	D6	0.89
7	8	1984	D7	0.87
8	8	1984	C2	0.80
8	8	1984	C3	0.94
8	8	1984	C4	0.86
8	8	1984	C5	0.95
8	8	1984	C6	0.90
8	8	1984	C7	0.94
8	8	1984	C8	0.89
8	8	1984	C9	0.95
8	8	1984	D5	0.99
8	8	1984	D6	0.95
8	8	1984	D7	0.88
9	8	1984	C2	0.83
9	8	1984	C3	0.94
9	8	1984	C4	0.92
9	8	1984	C5	0.93
9	8	1984	C6	0.86
9	8	1984	C7	0.91
9	8	1984	C8	0.82
9	8	1984	C9	0.90
9	8	1984	D5	0.98
9	8	1984	D6	0.90
9	8	1984	D7	0.87
10	8	1984	C2	0.78
10	8	1984	C3	0.80
10	8	1984	C4	0.80
10	8	1984	C5	0.88
10	8	1984	C6	0.70
10	8	1984	C7	0.90
10	8	1984	C8	0.90
10	8	1984	C9	0.88
10	8	1984	D5	0.98
10	8	1984	D6	0.80
10	8	1984	D7	0.85
11	8	1984	C2	0.80
11	8	1984	C3	0.82
11	8	1984	C4	0.92
11	8	1984	C5	0.92
11	8	1984	C6	0.86

TABLE 2

Daily Pond Measurements. Bogor, Indonesia, Cycle I, Dry Season

DATE			POND	POND DEPTH
DAY	MONTH	YEAR		m
XX	XX	XXXX		X.XX
11	8	1984	C7	0.86
11	8	1984	C8	0.81
11	8	1984	C9	0.90
11	8	1984	D5	1.00
11	8	1984	D6	0.86
11	8	1984	D7	0.88
12	8	1984	C2	0.82
12	8	1984	C3	0.82
12	8	1984	C4	0.85
12	8	1984	C5	0.92
12	8	1984	C6	0.74
12	8	1984	C7	0.83
12	8	1984	C8	0.89
12	8	1984	C9	0.99
12	8	1984	D5	0.99
12	8	1984	D6	0.99
12	8	1984	D7	0.94
13	8	1984	C2	0.89
13	8	1984	C3	0.89
13	8	1984	C4	0.90
13	8	1984	C5	0.92
13	8	1984	C6	0.87
13	8	1984	C7	0.88
13	8	1984	C8	0.86
13	8	1984	C9	0.98
13	8	1984	D5	0.99
13	8	1984	D6	1.00
13	8	1984	D7	0.96
14	8	1984	C2	0.94
14	8	1984	C3	0.95
14	8	1984	C4	0.85
14	8	1984	C5	0.95
14	8	1984	C6	0.91
14	8	1984	C7	0.97
14	8	1984	C8	0.91
14	8	1984	C9	0.99
14	8	1984	D5	1.00
14	8	1984	D6	1.00
14	8	1984	D7	0.96
15	8	1984	C2	0.87
15	8	1984	C3	0.87
15	8	1984	C4	0.94
15	8	1984	C5	0.94
15	8	1984	C6	0.82
15	8	1984	C7	0.89
15	8	1984	C8	0.88
15	8	1984	C9	0.98
15	8	1984	D5	0.99
15	8	1984	D6	0.97
15	8	1984	D7	0.92
16	8	1984	C2	0.95
16	8	1984	C3	0.95
16	8	1984	C4	0.95
16	8	1984	C5	0.96
16	8	1984	C6	0.90
16	8	1984	C7	0.92
16	8	1984	C8	0.96
16	8	1984	C9	0.99
16	8	1984	D5	0.98
16	8	1984	D6	0.94
16	8	1984	D7	0.94
17	8	1984	C2	0.90
17	8	1984	C3	0.90
17	8	1984	C4	0.97
17	8	1984	C5	0.93
17	8	1984	C6	1.00
17	8	1984	C7	1.00
17	8	1984	C8	0.90
17	8	1984	C9	1.00
17	8	1984	D5	0.99
17	8	1984	D6	0.94
17	8	1984	D7	0.94
18	8	1984	C2	0.86
18	8	1984	C3	0.86
18	8	1984	C4	0.92
18	8	1984	C5	0.93
18	8	1984	C6	0.88
18	8	1984	C7	0.92
18	8	1984	C8	0.85
18	8	1984	C9	0.99
18	8	1984	D5	0.99
18	8	1984	D6	1.00
18	8	1984	D7	0.96
20	8	1984	C2	0.90
20	8	1984	C3	0.90
20	8	1984	C4	0.93
20	8	1984	C5	0.94
20	8	1984	C6	0.86
20	8	1984	C7	0.82
20	8	1984	C8	0.85
20	8	1984	C9	0.98
20	8	1984	D5	0.98
20	8	1984	D6	0.98
20	8	1984	D7	0.94
21	8	1984	C2	0.85
21	8	1984	C3	0.84
21	8	1984	C4	0.91
21	8	1984	C5	0.93
21	8	1984	C6	0.91
21	8	1984	C7	0.86
21	8	1984	C8	0.92
21	8	1984	C9	0.99
21	8	1984	D5	0.99
21	8	1984	D6	0.86
21	8	1984	D7	0.92
22	8	1984	C2	0.85
22	8	1984	C3	0.84
22	8	1984	C4	0.90
22	8	1984	C5	0.95
22	8	1984	C6	0.98
22	8	1984	C7	0.99
22	8	1984	C8	0.94
22	8	1984	C9	0.99
22	8	1984	D5	1.00
22	8	1984	D6	1.00
22	8	1984	D7	0.94
23	8	1984	C2	0.83
23	8	1984	C3	0.84
23	8	1984	C4	0.88
23	8	1984	C5	0.94
23	8	1984	C6	0.99
23	8	1984	C7	1.00
23	8	1984	C8	0.87
23	8	1984	C9	0.99
23	8	1984	D5	0.99
23	8	1984	D6	0.96
23	8	1984	D7	0.93
24	8	1984	C2	0.90
24	8	1984	C3	0.90
24	8	1984	C4	0.90
24	8	1984	C5	0.95
24	8	1984	C6	0.88
24	8	1984	C7	0.91
24	8	1984	C8	0.96
24	8	1984	C9	0.99
24	8	1984	D5	1.00
24	8	1984	D6	0.90
24	8	1984	D7	0.92
25	8	1984	C2	0.88
25	8	1984	C3	0.89
25	8	1984	C4	0.89
25	8	1984	C5	0.92
25	8	1984	C6	0.84
25	8	1984	C7	0.89
25	8	1984	C8	0.90
25	8	1984	C9	0.99
25	8	1984	D5	0.99

Daily Pond Measurements. Bogor, Indonesia, Cycle I, Dry Season

DATE			POND	POND DEPTH
DAY	MONTH	YEAR		m
XX	XX	XXXX		X.XX
25	8	1984	D6	0.94
25	8	1984	D7	0.95
26	8	1984	C2	0.85
26	8	1984	C3	0.87
26	8	1984	C4	0.82
26	8	1984	C5	0.90
26	8	1984	C6	0.80
26	8	1984	C7	0.85
26	8	1984	C8	0.87
26	8	1984	C9	0.99
26	8	1984	D5	0.99
26	8	1984	D6	0.96
26	8	1984	D7	0.94
27	8	1984	C2	0.85
27	8	1984	C3	0.85
27	8	1984	C4	0.88
27	8	1984	C5	0.97
27	8	1984	C6	0.86
27	8	1984	C7	0.89
27	8	1984	C8	0.92
27	8	1984	C9	0.99
27	8	1984	D5	0.99
27	8	1984	D6	0.92
27	8	1984	D7	0.93
28	8	1984	C2	0.83
28	8	1984	C3	0.82
28	8	1984	C4	0.90
28	8	1984	C5	0.93
28	8	1984	C6	0.87
28	8	1984	C7	0.95
28	8	1984	C8	0.84
28	8	1984	C9	0.98
28	8	1984	D5	0.99
28	8	1984	D6	1.00
28	8	1984	D7	0.94
29	8	1984	C2	0.85
29	8	1984	C3	0.84
29	8	1984	C4	0.88
29	8	1984	C5	0.96
29	8	1984	C6	0.92
29	8	1984	C7	0.94
29	8	1984	C8	0.90
29	8	1984	C9	0.99
29	8	1984	D5	0.99
29	8	1984	D6	1.00
29	8	1984	D7	0.96
30	8	1984	C2	0.80
30	8	1984	C3	0.82
30	8	1984	C4	0.86
30	8	1984	C5	0.93
30	8	1984	C6	0.82
30	8	1984	C7	0.85
30	8	1984	C8	0.88
30	8	1984	C9	0.99
30	8	1984	D5	0.99
30	8	1984	D6	1.00
30	8	1984	D7	0.93
31	8	1984	C2	0.89
31	8	1984	C3	0.89
31	8	1984	C4	0.93
31	8	1984	C5	0.96
31	8	1984	C6	0.88
31	8	1984	C7	0.91
31	8	1984	C8	0.90
31	8	1984	C9	0.99
31	8	1984	D5	0.99
31	8	1984	D6	1.00
31	8	1984	D7	0.96
1	9	1984	C2	0.86
1	9	1984	C3	0.86
1	9	1984	C4	0.86
1	9	1984	C5	0.82
1	9	1984	C6	0.90
1	9	1984	C7	0.89
1	9	1984	C8	0.82
1	9	1984	C9	0.99
1	9	1984	D5	0.99
1	9	1984	D6	1.00
1	9	1984	D7	0.96
2	9	1984	C2	0.83
2	9	1984	C3	0.84
2	9	1984	C4	0.86
2	9	1984	C5	0.94
2	9	1984	C6	0.80
2	9	1984	C7	0.82
2	9	1984	C8	0.80
2	9	1984	C9	0.98
2	9	1984	D5	0.99
2	9	1984	D6	1.00
2	9	1984	D7	0.92
3	9	1984	C2	0.83
3	9	1984	C3	0.84
3	9	1984	C4	0.88
3	9	1984	C5	0.96
3	9	1984	C6	0.95
3	9	1984	C7	0.95
3	9	1984	C8	0.87
3	9	1984	C9	0.99
3	9	1984	D5	0.99
3	9	1984	D6	1.00
3	9	1984	D7	0.92
4	9	1984	C2	0.88
4	9	1984	C3	0.88
4	9	1984	C4	0.86
4	9	1984	C5	0.93
4	9	1984	C6	0.87
4	9	1984	C7	0.88
4	9	1984	C8	0.86
4	9	1984	C9	0.99
4	9	1984	D5	0.99
4	9	1984	D6	1.00
4	9	1984	D7	0.94
5	9	1984	C2	0.95
5	9	1984	C3	0.86
5	9	1984	C4	0.93
5	9	1984	C5	0.94
5	9	1984	C6	0.89
5	9	1984	C7	0.91
5	9	1984	C8	0.96
5	9	1984	C9	0.97
5	9	1984	D5	0.99
5	9	1984	D6	1.00
5	9	1984	D7	0.94
6	9	1984	C2	0.87
6	9	1984	C3	0.87
6	9	1984	C4	0.90
6	9	1984	C5	0.93
6	9	1984	C6	0.87
6	9	1984	C7	0.85
6	9	1984	C8	0.99
6	9	1984	C9	0.98
6	9	1984	D5	0.99
6	9	1984	D6	1.00
6	9	1984	D7	0.95
7	9	1984	C2	0.90
7	9	1984	C3	0.92
7	9	1984	C4	0.88
7	9	1984	C5	0.95
7	9	1984	C6	0.86
7	9	1984	C7	0.88
7	9	1984	C8	0.89
7	9	1984	C9	0.99
7	9	1984	D5	0.99
7	9	1984	D6	1.00
7	9	1984	D7	0.97
8	9	1984	C2	0.84
8	9	1984	C3	0.86

Daily Pond Measurements. Bogor, Indonesia, Cycle I, Dry Season

DATE			POND	POND DEPTH
DAY	MONTH	YEAR		m
XX	XX	XXXX		X.XX
8	9	1984	C4	0.90
8	9	1984	C5	0.94
8	9	1984	C6	0.85
8	9	1984	C7	0.91
8	9	1984	C8	0.83
8	9	1984	C9	0.99
8	9	1984	D5	0.99
8	9	1984	D6	1.00
8	9	1984	D7	0.95
9	9	1984	C2	0.80
9	9	1984	C3	0.81
9	9	1984	C4	0.83
9	9	1984	C5	0.92
9	9	1984	C6	0.80
9	9	1984	C7	0.83
9	9	1984	C8	0.83
9	9	1984	C9	0.99
9	9	1984	D5	0.99
9	9	1984	D6	0.97
9	9	1984	D7	0.93
10	9	1984	C2	0.83
10	9	1984	C3	0.84
10	9	1984	C4	0.94
10	9	1984	C5	0.96
10	9	1984	C6	0.85
10	9	1984	C7	0.92
10	9	1984	C8	0.90
10	9	1984	C9	0.98
10	9	1984	D5	0.99
10	9	1984	D6	0.92
10	9	1984	D7	0.92
11	9	1984	C2	0.79
11	9	1984	C3	0.80
11	9	1984	C4	0.86
11	9	1984	C5	0.91
11	9	1984	C6	0.78
11	9	1984	C7	0.83
11	9	1984	C8	0.83
11	9	1984	C9	0.98
11	9	1984	D5	0.98
11	9	1984	D6	0.85
11	9	1984	D7	0.91
12	9	1984	C2	0.92
12	9	1984	C3	0.92
12	9	1984	C4	0.90
12	9	1984	C5	0.94
12	9	1984	C6	0.90
12	9	1984	C7	0.94
12	9	1984	C8	0.96
12	9	1984	C9	0.98
12	9	1984	D5	0.97
12	9	1984	D6	0.86
12	9	1984	D7	0.92
13	9	1984	C2	0.88
13	9	1984	C3	0.88
13	9	1984	C4	0.84
13	9	1984	C5	0.93
13	9	1984	C6	0.88
13	9	1984	C7	0.92
13	9	1984	C8	0.88
13	9	1984	C9	0.98
13	9	1984	D5	0.94
13	9	1984	D6	0.93
13	9	1984	D7	0.94
14	9	1984	C2	0.82
14	9	1984	C3	0.84
14	9	1984	C4	0.82
14	9	1984	C5	0.92
14	9	1984	C6	0.80
14	9	1984	C7	0.90
14	9	1984	C8	0.90
14	9	1984	C9	0.99
14	9	1984	D5	0.99
14	9	1984	D6	0.88
14	9	1984	D7	0.92
15	9	1984	C2	0.86
15	9	1984	C3	0.86
15	9	1984	C4	0.84
15	9	1984	C5	0.94
15	9	1984	C6	0.83
15	9	1984	C7	0.94
15	9	1984	C8	0.93
15	9	1984	C9	0.99
15	9	1984	D5	0.99
15	9	1984	D6	0.88
15	9	1984	D7	0.93
16	9	1984	C2	0.82
16	9	1984	C3	0.82
16	9	1984	C4	0.88
16	9	1984	C5	0.94
16	9	1984	C6	0.92
16	9	1984	C7	1.00
16	9	1984	C8	0.90
16	9	1984	C9	0.90
16	9	1984	D5	1.00
16	9	1984	D6	0.94
16	9	1984	D7	0.96
17	9	1984	C2	0.84
17	9	1984	C3	0.92
17	9	1984	C4	0.93
17	9	1984	C5	0.94
17	9	1984	C6	0.85
17	9	1984	C7	0.88
17	9	1984	C8	0.89
17	9	1984	C9	0.98
17	9	1984	D5	0.99
17	9	1984	D6	0.91
17	9	1984	D7	0.96
18	9	1984	C2	0.88
18	9	1984	C3	0.88
18	9	1984	C4	0.94
18	9	1984	C5	0.94
18	9	1984	C6	0.88
18	9	1984	C7	0.90
18	9	1984	C8	0.84
18	9	1984	C9	0.99
18	9	1984	D5	0.99
18	9	1984	D6	0.92
18	9	1984	D7	0.96
19	9	1984	C2	0.88
19	9	1984	C3	0.88
19	9	1984	C4	0.92
19	9	1984	C5	0.94
19	9	1984	C6	0.84
19	9	1984	C7	0.90
19	9	1984	C8	0.99
19	9	1984	C9	0.98
19	9	1984	D5	0.99
19	9	1984	D6	1.00
19	9	1984	D7	0.96
20	9	1984	C2	0.86
20	9	1984	C3	0.84
20	9	1984	C4	0.90
20	9	1984	C5	0.92
20	9	1984	C6	0.82
20	9	1984	C7	0.88
20	9	1984	C8	0.97
20	9	1984	C9	0.96
20	9	1984	D5	0.99
20	9	1984	D6	1.00
20	9	1984	D7	0.94
21	9	1984	C2	0.80
21	9	1984	C3	0.82
21	9	1984	C4	0.84
21	9	1984	C5	0.94
21	9	1984	C6	0.92
21	9	1984	C7	0.88

Daily Pond Measurements. Bogor, Indonesia, Cycle I, Dry Season

TABLE 2

DATE			POND	POND DEPTH
DAY	MONTH	YEAR		m
XX	XX	XXXX		X.XX
21	9	1984	C8	0.87
21	9	1984	C9	0.99
21	9	1984	D5	0.99
21	9	1984	D6	0.95
21	9	1984	D7	0.90
22	9	1984	C2	0.92
22	9	1984	C3	0.84
22	9	1984	C4	0.84
22	9	1984	C5	0.94
22	9	1984	C6	0.90
22	9	1984	C7	0.86
22	9	1984	C8	0.85
22	9	1984	C9	0.94
22	9	1984	D5	0.99
22	9	1984	D6	0.95
22	9	1984	D7	0.90
23	9	1984	C2	0.84
23	9	1984	C3	0.84
23	9	1984	C4	0.88
23	9	1984	C5	0.92
23	9	1984	C6	0.90
23	9	1984	C7	0.90
23	9	1984	C8	0.84
23	9	1984	C9	0.99
23	9	1984	D5	0.99
23	9	1984	D6	0.88
23	9	1984	D7	0.90
24	9	1984	C2	0.82
24	9	1984	C3	0.82
24	9	1984	C4	0.82
24	9	1984	C5	0.91
24	9	1984	C6	0.83
24	9	1984	C7	0.86
24	9	1984	C8	0.80
24	9	1984	C9	0.99
24	9	1984	D5	0.99
24	9	1984	D6	0.85
24	9	1984	D7	0.88
25	9	1984	C2	0.82
25	9	1984	C3	0.82
25	9	1984	C4	0.80
25	9	1984	C5	0.90
25	9	1984	C6	0.90
25	9	1984	C7	0.88
25	9	1984	C8	0.88
25	9	1984	C9	0.99
25	9	1984	D5	0.99
25	9	1984	D6	0.80
25	9	1984	D7	0.86
26	9	1984	C2	0.90
26	9	1984	C3	0.88
26	9	1984	C4	0.86
26	9	1984	C5	0.94
26	9	1984	C6	0.86
26	9	1984	C7	0.88
26	9	1984	C8	0.88
26	9	1984	C9	0.99
26	9	1984	D5	0.99
26	9	1984	D6	0.84
26	9	1984	D7	0.88
27	9	1984	C2	0.90
27	9	1984	C3	0.90
27	9	1984	C4	0.93
27	9	1984	C5	0.93
27	9	1984	C6	0.93
27	9	1984	C7	0.91
27	9	1984	C8	0.92
27	9	1984	C9	0.99
27	9	1984	D5	0.99
27	9	1984	D6	1.00
27	9	1984	D7	0.98
28	9	1984	C2	0.94
28	9	1984	C3	0.84
28	9	1984	C4	0.81
28	9	1984	C5	0.88
28	9	1984	C6	0.81
28	9	1984	C7	0.82
28	9	1984	C8	0.82
28	9	1984	C9	0.98
28	9	1984	D5	0.99
28	9	1984	D6	0.96
28	9	1984	D7	0.90
29	9	1984	C2	0.83
29	9	1984	C3	0.82
29	9	1984	C4	0.94
29	9	1984	C5	0.88
29	9	1984	C6	0.89
29	9	1984	C7	0.89
29	9	1984	C8	0.96
29	9	1984	C9	0.94
29	9	1984	D5	0.99
29	9	1984	D6	0.98
29	9	1984	D7	0.96
30	9	1984	C2	0.83
30	9	1984	C3	0.84
30	9	1984	C4	0.83
30	9	1984	C5	0.94
30	9	1984	C6	0.92
30	9	1984	C7	0.97
30	9	1984	C8	0.80
30	9	1984	C9	0.97
30	9	1984	D5	0.99
30	9	1984	D6	0.90
30	9	1984	D7	0.90
1	10	1984	C2	0.84
1	10	1984	C3	0.84
1	10	1984	C4	0.96
1	10	1984	C5	0.98
1	10	1984	C6	0.89
1	10	1984	C7	0.90
1	10	1984	C8	0.97
1	10	1984	C9	0.98
1	10	1984	D5	0.99
1	10	1984	D6	0.86
1	10	1984	D7	0.91
2	10	1984	C2	0.88
2	10	1984	C3	0.88
2	10	1984	C4	0.94
2	10	1984	C5	0.96
2	10	1984	C6	0.96
2	10	1984	C7	0.99
2	10	1984	C8	0.91
2	10	1984	C9	0.99
2	10	1984	D5	0.99
2	10	1984	D6	0.95
2	10	1984	D7	0.99
3	10	1984	C2	0.94
3	10	1984	C3	0.96
3	10	1984	C4	0.93
3	10	1984	C5	0.94
3	10	1984	C6	0.99
3	10	1984	C7	1.00
3	10	1984	C8	0.92
3	10	1984	C9	0.99
3	10	1984	D5	0.99
3	10	1984	D6	0.94
3	10	1984	D7	0.97
4	10	1984	C2	0.85
4	10	1984	C3	0.85
4	10	1984	C4	0.90
4	10	1984	C5	0.93
4	10	1984	C6	0.88
4	10	1984	C7	0.89
4	10	1984	C8	0.85
4	10	1984	C9	0.98
4	10	1984	D5	0.99
4	10	1984	D6	0.93

TABLE 2

Daily Pond Measurements. Bogor, Indonesia, Cycle I, Dry Season

DATE			POND	POND DEPTH
DAY	MONTH	YEAR		m
XX	XX	XXXX		X.XX
4	10	1984	D7	0.94
5	10	1984	C2	0.81
5	10	1984	C3	0.80
5	10	1984	C4	0.88
5	10	1984	C5	0.94
5	10	1984	C6	0.96
5	10	1984	C7	0.94
5	10	1984	C8	0.93
5	10	1984	C9	0.98
5	10	1984	D5	0.94
5	10	1984	D6	0.87
5	10	1984	D7	0.95
6	10	1984	C2	0.86
6	10	1984	C3	0.86
6	10	1984	C4	0.92
6	10	1984	C5	0.94
6	10	1984	C6	0.86
6	10	1984	C7	0.90
6	10	1984	C8	0.89
6	10	1984	C9	0.98
6	10	1984	D5	0.99
6	10	1984	D6	0.84
6	10	1984	D7	0.92
7	10	1984	C2	0.86
7	10	1984	C3	0.86
7	10	1984	C4	0.92
7	10	1984	C5	0.92
7	10	1984	C6	0.90
7	10	1984	C7	0.88
7	10	1984	C8	0.88
7	10	1984	C9	0.98
7	10	1984	D5	0.99
7	10	1984	D6	0.85
7	10	1984	D7	0.90
8	10	1984	C2	0.84
8	10	1984	C3	0.84
8	10	1984	C4	0.86
8	10	1984	C5	0.92
8	10	1984	C6	0.86
8	10	1984	C7	0.86
8	10	1984	C8	0.86
8	10	1984	C9	0.98
8	10	1984	D5	0.99
8	10	1984	D6	0.82
8	10	1984	D7	0.88
9	10	1984	C2	0.80
9	10	1984	C3	0.82
9	10	1984	C4	0.78
9	10	1984	C5	0.92
9	10	1984	C6	0.82
9	10	1984	C7	0.90
9	10	1984	C8	0.84
9	10	1984	C9	0.98
9	10	1984	D5	0.99
9	10	1984	D6	0.82
9	10	1984	D7	0.86
10	10	1984	C2	0.80
10	10	1984	C3	0.86
10	10	1984	C4	0.95
10	10	1984	C5	0.92
10	10	1984	C6	0.95
10	10	1984	C7	0.86
10	10	1984	C8	0.91
10	10	1984	C9	0.90
10	10	1984	D5	0.99
10	10	1984	D6	1.00
10	10	1984	D7	0.99
11	10	1984	C2	0.82
11	10	1984	C3	0.86
11	10	1984	C4	0.96
11	10	1984	C5	0.96
11	10	1984	C6	0.95
11	10	1984	C7	0.82
11	10	1984	C8	0.92
11	10	1984	C9	0.92
11	10	1984	D5	0.99
11	10	1984	D6	0.96
11	10	1984	D7	0.99
12	10	1984	C2	0.82
12	10	1984	C3	0.87
12	10	1984	C4	0.93
12	10	1984	C5	0.93
12	10	1984	C6	0.95
12	10	1984	C7	0.84
12	10	1984	C8	0.93
12	10	1984	C9	0.93
12	10	1984	D5	0.99
12	10	1984	D6	0.94
12	10	1984	D7	0.99
13	10	1984	C2	0.86
13	10	1984	C3	0.87
13	10	1984	C4	0.95
13	10	1984	C5	0.95
13	10	1984	C6	0.93
13	10	1984	C7	0.92
13	10	1984	C8	0.90
13	10	1984	C9	0.97
13	10	1984	D5	0.99
13	10	1984	D6	0.96
13	10	1984	D7	0.86
14	10	1984	C2	0.87
14	10	1984	C3	0.87
14	10	1984	C4	0.96
14	10	1984	C5	0.96
14	10	1984	C6	0.96
14	10	1984	C7	0.94
14	10	1984	C8	0.92
14	10	1984	C9	0.97
14	10	1984	D5	0.99
14	10	1984	D6	0.96
14	10	1984	D7	0.86
15	10	1984	C2	0.85
15	10	1984	C3	0.85
15	10	1984	C4	0.94
15	10	1984	C5	0.91
15	10	1984	C6	0.90
15	10	1984	C7	0.88
15	10	1984	C8	0.84
15	10	1984	C9	0.98
15	10	1984	D5	1.00
15	10	1984	D6	0.96
15	10	1984	D7	0.82
16	10	1984	C2	0.80
16	10	1984	C3	0.82
16	10	1984	C4	0.90
16	10	1984	C5	0.92
16	10	1984	C6	0.86
16	10	1984	C7	0.88
16	10	1984	C8	0.85
16	10	1984	C9	0.99
16	10	1984	D5	0.99
16	10	1984	D6	0.97
16	10	1984	D7	0.88
17	10	1984	C2	0.84
17	10	1984	C3	0.82
17	10	1984	C4	0.92
17	10	1984	C5	0.94
17	10	1984	C6	0.88
17	10	1984	C7	0.92
17	10	1984	C8	0.89
17	10	1984	C9	0.99
17	10	1984	D5	0.99
17	10	1984	D6	0.98
17	10	1984	D7	0.89
18	10	1984	C2	0.86
18	10	1984	C3	0.84
18	10	1984	C4	0.93

Daily Pond Measurements. Bogor, Indonesia, Cycle I, Dry Season

DATE			POND	POND DEPTH
DAY	MONTH	YEAR		m
XX	XX	XXXX		X.XX
18	10	1984	C5	0.94
18	10	1984	C6	0.86
18	10	1984	C7	0.94
18	10	1984	C8	0.87
18	10	1984	C9	0.99
18	10	1984	D5	0.99
18	10	1984	D6	0.95
18	10	1984	D7	0.92
19	10	1984	C2	0.88
19	10	1984	C3	0.88
19	10	1984	C4	0.94
19	10	1984	C5	0.94
19	10	1984	C6	0.98
19	10	1984	C7	1.00
19	10	1984	C8	0.90
19	10	1984	C9	0.99
19	10	1984	D5	0.99
19	10	1984	D6	0.96
19	10	1984	D7	0.97
20	10	1984	C2	0.87
20	10	1984	C3	0.87
20	10	1984	C4	0.93
20	10	1984	C5	0.93
20	10	1984	C6	0.97
20	10	1984	C7	0.98
20	10	1984	C8	0.91
20	10	1984	C9	0.98
20	10	1984	D5	0.99
20	10	1984	D6	0.95
20	10	1984	D7	0.96
21	10	1984	C2	0.88
21	10	1984	C3	0.88
21	10	1984	C4	0.91
21	10	1984	C5	0.91
21	10	1984	C6	0.96
21	10	1984	C7	0.97
21	10	1984	C8	0.90
21	10	1984	C9	0.97
21	10	1984	D5	0.99
21	10	1984	D6	0.96
21	10	1984	D7	0.95
22	10	1984	C2	0.84
22	10	1984	C3	0.84
22	10	1984	C4	0.91
22	10	1984	C5	0.92
22	10	1984	C6	0.89
22	10	1984	C7	0.88
22	10	1984	C8	0.89
22	10	1984	C9	0.99
22	10	1984	D5	0.99
22	10	1984	D6	0.92
22	10	1984	D7	0.90
23	10	1984	C2	0.85
23	10	1984	C3	0.85
23	10	1984	C4	0.92
23	10	1984	C5	0.91
23	10	1984	C6	0.85
23	10	1984	C7	0.87
23	10	1984	C8	0.88
23	10	1984	C9	0.99
23	10	1984	D5	0.99
23	10	1984	D6	0.93
23	10	1984	D7	0.91
24	10	1984	C2	0.88
24	10	1984	C3	0.88
24	10	1984	C4	0.94
24	10	1984	C5	0.94
24	10	1984	C6	0.90
24	10	1984	C7	0.92
24	10	1984	C8	0.89
24	10	1984	C9	0.99
24	10	1984	D5	0.99
24	10	1984	D6	0.96
24	10	1984	D7	0.96
25	10	1984	C2	0.87
25	10	1984	C3	0.87
25	10	1984	C4	0.93
25	10	1984	C5	0.93
25	10	1984	C6	0.91
25	10	1984	C7	0.93
25	10	1984	C8	0.88
25	10	1984	C9	0.99
25	10	1984	D5	0.99
25	10	1984	D6	0.94
25	10	1984	D7	0.95
26	10	1984	C2	0.86
26	10	1984	C3	0.86
26	10	1984	C4	0.92
26	10	1984	C5	0.92
26	10	1984	C6	0.90
26	10	1984	C7	0.92
26	10	1984	C8	0.88
26	10	1984	C9	0.98
26	10	1984	D5	0.99
26	10	1984	D6	0.95
26	10	1984	D7	0.94
27	10	1984	C2	0.87
27	10	1984	C3	0.87
27	10	1984	C4	0.94
27	10	1984	C5	0.93
27	10	1984	C6	0.92
27	10	1984	C7	0.92
27	10	1984	C8	0.87
27	10	1984	C9	0.99
27	10	1984	D5	0.99
27	10	1984	D6	0.94
27	10	1984	D7	0.93
28	10	1984	C2	0.91
28	10	1984	C3	0.90
28	10	1984	C4	0.94
28	10	1984	C5	0.93
28	10	1984	C6	0.88
28	10	1984	C7	0.90
28	10	1984	C8	0.90
28	10	1984	C9	0.99
28	10	1984	D5	0.99
28	10	1984	D6	1.00
28	10	1984	D7	0.95
29	10	1984	C2	0.86
29	10	1984	C3	0.86
29	10	1984	C4	0.86
29	10	1984	C5	0.92
29	10	1984	C6	0.90
29	10	1984	C7	0.92
29	10	1984	C8	0.86
29	10	1984	C9	0.99
29	10	1984	D5	0.99
29	10	1984	D6	0.96
29	10	1984	D7	0.90
30	10	1984	C2	0.84
30	10	1984	C3	0.84
30	10	1984	C4	0.93
30	10	1984	C5	0.94
30	10	1984	C6	0.88
30	10	1984	C7	0.90
30	10	1984	C8	0.86
30	10	1984	C9	0.99
30	10	1984	D5	0.96
30	10	1984	D6	0.92
30	10	1984	D7	0.86
31	10	1984	C2	0.83
31	10	1984	C3	0.84
31	10	1984	C4	0.94
31	10	1984	C5	0.95
31	10	1984	C6	0.92
31	10	1984	C7	0.94
31	10	1984	C8	0.89

TABLE 2

Daily Pond Measurements. Bogor, Indonesia, Cycle I, Wet Season

DATE			POND	POND DEPTH
DAY	MONTH	YEAR		m
XX	XX	XXXX		X.XX
31	10	1984	C9	0.99
31	10	1984	D5	0.96
31	10	1984	D6	0.92
31	10	1984	D7	0.88
1	11	1984	C2	0.90
1	11	1984	C3	0.89
1	11	1984	C4	0.88
1	11	1984	C5	0.92
1	11	1984	C6	0.94
1	11	1984	C7	0.84
1	11	1984	C8	0.86
1	11	1984	C9	0.99
1	11	1984	D5	0.99
1	11	1984	D6	0.90
1	11	1984	D7	0.92
2	11	1984	C2	0.82
2	11	1984	C3	0.82
2	11	1984	C4	0.88
2	11	1984	C5	0.94
2	11	1984	C6	0.89
2	11	1984	C7	0.92
2	11	1984	C8	0.85
2	11	1984	C9	0.98
2	11	1984	D5	0.96
2	11	1984	D6	0.87
2	11	1984	D7	0.85
3	11	1984	C2	0.81
3	11	1984	C3	0.81
3	11	1984	C4	0.87
3	11	1984	C5	0.93
3	11	1984	C6	0.88
3	11	1984	C7	0.91
3	11	1984	C8	0.86
3	11	1984	C9	0.97
3	11	1984	D5	0.98
3	11	1984	D6	0.86
3	11	1984	D7	0.86
4	11	1984	C2	0.85
4	11	1984	C3	0.87
4	11	1984	C4	0.95
4	11	1984	C5	0.95
4	11	1984	C6	0.93
4	11	1984	C7	0.90
4	11	1984	C8	0.90
4	11	1984	C9	0.99
4	11	1984	D5	0.95
4	11	1984	D6	0.99
4	11	1984	D7	0.98
5	11	1984	C2	0.85
5	11	1984	C3	0.86
5	11	1984	C4	0.94
5	11	1984	C5	0.95
5	11	1984	C6	0.87
5	11	1984	C7	0.86
5	11	1984	C8	0.87
5	11	1984	C9	0.99
5	11	1984	D5	0.99
5	11	1984	D6	1.00
5	11	1984	D7	0.96
6	11	1984	C2	0.86
6	11	1984	C3	0.86
6	11	1984	C4	0.93
6	11	1984	C5	0.96
6	11	1984	C6	0.89
6	11	1984	C7	0.87
6	11	1984	C8	0.88
6	11	1984	C9	0.99
6	11	1984	D5	0.99
6	11	1984	D6	0.99
6	11	1984	D7	0.94
7	11	1984	C2	0.88
7	11	1984	C3	0.88
7	11	1984	C4	0.92
7	11	1984	C5	0.94
7	11	1984	C6	0.94
7	11	1984	C7	0.99
7	11	1984	C8	0.90
7	11	1984	C9	0.99
7	11	1984	D5	0.99
7	11	1984	D6	0.96
7	11	1984	D7	0.97
8	11	1984	C2	0.87
8	11	1984	C3	0.87
8	11	1984	C4	0.91
8	11	1984	C5	0.93
8	11	1984	C6	0.93
8	11	1984	C7	0.94
8	11	1984	C8	0.89
8	11	1984	C9	0.99
8	11	1984	D5	0.99
8	11	1984	D6	0.95
8	11	1984	D7	0.91
9	11	1984	C2	0.88
9	11	1984	C3	0.88
9	11	1984	C4	0.93
9	11	1984	C5	0.93
9	11	1984	C6	0.94
9	11	1984	C7	0.95
9	11	1984	C8	0.90
9	11	1984	C9	0.99
9	11	1984	D5	0.99
9	11	1984	D6	0.97
9	11	1984	D7	0.94
10	11	1984	C2	0.83
10	11	1984	C3	0.83
10	11	1984	C4	0.93
10	11	1984	C5	0.94
10	11	1984	C6	0.90
10	11	1984	C7	0.90
10	11	1984	C8	0.88
10	11	1984	C9	0.98
10	11	1984	D5	0.94
10	11	1984	D6	0.92
10	11	1984	D7	0.96
11	11	1984	C2	0.82
11	11	1984	C3	0.82
11	11	1984	C4	0.92
11	11	1984	C5	0.93
11	11	1984	C6	0.91
11	11	1984	C7	0.91
11	11	1984	C8	0.87
11	11	1984	C9	0.97
11	11	1984	D5	0.99
11	11	1984	D6	0.93
11	11	1984	D7	0.95

TABLE 2

Daily Pond Measurements. Bogor, Indonesia, Cycle I, Wet Season

DATE			POND	POND DEPTH
DAY	MONTH	YEAR		m
XX	XX	XXXX		X.XX
5	11	1983	C1	0.68
5	11	1983	C2	0.70
5	11	1983	C3	0.66
5	11	1983	C4	0.84
5	11	1983	C5	0.80
5	11	1983	C6	0.80
5	11	1983	C7	0.80
5	11	1983	C8	0.80
5	11	1983	C9	0.96
5	11	1983	D5	0.78
5	11	1983	D6	0.74
5	11	1983	D7	0.72
7	11	1983	C1	0.91
7	11	1983	C2	0.75
7	11	1983	C3	0.72
7	11	1983	C4	0.92
7	11	1983	C5	0.80
7	11	1983	C6	0.80
7	11	1983	C7	0.64
7	11	1983	C8	0.78
7	11	1983	C9	0.84
7	11	1983	D5	0.81
7	11	1983	D6	0.74
7	11	1983	D7	0.76
8	11	1983	C1	0.80
8	11	1983	C2	0.76
8	11	1983	C3	0.76
8	11	1983	C4	0.90
8	11	1983	C5	0.88
8	11	1983	C6	0.75
8	11	1983	C7	0.86
8	11	1983	C8	0.84
8	11	1983	C9	0.96
8	11	1983	D5	0.96
8	11	1983	D6	0.80
8	11	1983	D7	0.88
9	11	1983	C1	0.88
9	11	1983	C2	0.82
9	11	1983	C3	0.76
9	11	1983	C4	0.78
9	11	1983	C5	0.78
9	11	1983	C6	0.75
9	11	1983	C7	0.81
9	11	1983	C8	0.72
9	11	1983	C9	0.88
9	11	1983	D5	0.82
9	11	1983	D6	0.90
9	11	1983	D7	0.74
10	11	1983	C1	0.73
10	11	1983	C2	0.73
10	11	1983	C3	0.70
10	11	1983	C4	0.78
10	11	1983	C5	0.80
10	11	1983	C6	0.74
10	11	1983	C7	0.80
10	11	1983	C8	0.67
10	11	1983	C9	0.89
10	11	1983	D5	0.86
10	11	1983	D6	0.80
10	11	1983	D7	0.78
11	11	1983	C1	0.64
11	11	1983	C2	0.70
11	11	1983	C3	0.69
11	11	1983	C4	0.74
11	11	1983	C5	0.80
11	11	1983	C6	0.66
11	11	1983	C7	0.76
11	11	1983	C8	0.61
11	11	1983	C9	0.78
11	11	1983	D5	0.95
11	11	1983	D6	0.86
11	11	1983	D7	0.70
12	11	1983	C1	0.76
12	11	1983	C2	0.78
12	11	1983	C3	0.74
12	11	1983	C4	0.86
12	11	1983	C5	0.87
12	11	1983	C6	0.82
12	11	1983	C7	0.84
12	11	1983	C8	0.70
12	11	1983	C9	0.85
12	11	1983	D5	0.90
12	11	1983	D6	0.76
12	11	1983	D7	0.80
13	11	1983	C1	0.64
13	11	1983	C2	0.74
13	11	1983	C3	0.72
13	11	1983	C4	0.80
13	11	1983	C5	0.82
13	11	1983	C6	0.80
13	11	1983	C7	0.80
13	11	1983	C8	0.60
13	11	1983	C9	0.78
13	11	1983	D5	0.93
13	11	1983	D6	0.75
13	11	1983	D7	0.90
14	11	1983	C1	0.65
14	11	1983	C2	0.80
14	11	1983	C3	0.76
14	11	1983	C4	0.90
14	11	1983	C5	0.87
14	11	1983	C6	0.88
14	11	1983	C7	0.82
14	11	1983	C8	0.84
14	11	1983	C9	0.96
14	11	1983	D5	0.84
14	11	1983	D6	0.78
14	11	1983	D7	0.80
15	11	1983	C1	0.88
15	11	1983	C2	0.80
15	11	1983	C3	0.72
15	11	1983	C4	0.78
15	11	1983	C5	0.80
15	11	1983	C6	0.72
15	11	1983	C7	0.80
15	11	1983	C8	0.65
15	11	1983	C9	0.85
15	11	1983	D5	0.80
15	11	1983	D6	0.84
15	11	1983	D7	0.80
16	11	1983	C1	0.80
16	11	1983	C2	0.68
16	11	1983	C3	0.64
16	11	1983	C4	0.72
16	11	1983	C5	0.80
16	11	1983	C6	0.66
16	11	1983	C7	0.76
16	11	1983	C8	0.56
16	11	1983	C9	0.84
16	11	1983	D5	0.80
16	11	1983	D6	0.76
16	11	1983	D7	0.88
17	11	1983	C1	0.76
17	11	1983	C2	0.62
17	11	1983	C3	0.65
17	11	1983	C4	0.73
17	11	1983	C5	0.80
17	11	1983	C6	0.73
17	11	1983	C7	0.80
17	11	1983	C8	0.77
17	11	1983	C9	0.84
17	11	1983	D5	0.93
17	11	1983	D6	0.74
17	11	1983	D7	0.74
18	11	1983	C1	0.78
18	11	1983	C2	0.71
18	11	1983	C3	0.76

Daily Pond Measurements. Bogor, Indonesia, Cycle I, Wet Season

DATE			POND	POND DEPTH
DAY	MONTH	YEAR		m
XX	XX	XXXX		X.XX
18	11	1983	C4	0.90
18	11	1983	C5	0.93
18	11	1983	C6	0.88
18	11	1983	C7	0.90
18	11	1983	C8	0.87
18	11	1983	C9	0.88
18	11	1983	D5	0.88
18	11	1983	D6	0.86
18	11	1983	D7	0.76
19	11	1983	C1	0.90
19	11	1983	C2	0.85
19	11	1983	C3	0.73
19	11	1983	C4	0.88
19	11	1983	C5	0.92
19	11	1983	C6	0.88
19	11	1983	C7	0.85
19	11	1983	C8	0.84
19	11	1983	C9	0.97
19	11	1983	D5	0.99
19	11	1983	D6	0.88
19	11	1983	D7	0.86
21	11	1983	C1	0.89
21	11	1983	C2	0.68
21	11	1983	C3	0.78
21	11	1983	C4	0.80
21	11	1983	C5	0.86
21	11	1983	C6	0.82
21	11	1983	C7	0.88
21	11	1983	C8	0.80
21	11	1983	C9	1.00
21	11	1983	D5	0.90
21	11	1983	D6	0.69
21	11	1983	D7	0.78
22	11	1983	C1	0.85
22	11	1983	C2	0.75
22	11	1983	C3	0.73
22	11	1983	C4	0.86
22	11	1983	C5	0.85
22	11	1983	C6	0.85
22	11	1983	C7	0.87
22	11	1983	C8	0.84
22	11	1983	C9	0.86
22	11	1983	D5	0.88
22	11	1983	D6	0.80
22	11	1983	D7	0.82
23	11	1983	C1	0.99
23	11	1983	C2	0.84
23	11	1983	C3	0.80
23	11	1983	C4	0.88
23	11	1983	C5	0.85
23	11	1983	C6	0.80
23	11	1983	C7	0.92
23	11	1983	C8	0.88
23	11	1983	C9	0.80
23	11	1983	D5	0.85
23	11	1983	D6	0.76
23	11	1983	D7	0.82
24	11	1983	C1	0.78
24	11	1983	C2	0.70
24	11	1983	C3	0.80
24	11	1983	C4	0.88
24	11	1983	C5	0.90
24	11	1983	C6	0.88
24	11	1983	C7	0.94
24	11	1983	C8	0.90
24	11	1983	C9	0.92
24	11	1983	D5	0.88
24	11	1983	D6	0.88
24	11	1983	D7	0.92
25	11	1983	C1	0.96
25	11	1983	C2	0.86
25	11	1983	C3	0.92
25	11	1983	C4	0.82
25	11	1983	C5	0.86
25	11	1983	C6	0.92
25	11	1983	C7	0.90
25	11	1983	C8	0.88
25	11	1983	C9	0.88
25	11	1983	D5	0.89
25	11	1983	D6	0.87
25	11	1983	D7	0.88
26	11	1983	C1	0.80
26	11	1983	C2	0.76
26	11	1983	C3	0.80
26	11	1983	C4	0.75
26	11	1983	C5	0.86
26	11	1983	C6	0.76
26	11	1983	C7	0.80
26	11	1983	C8	0.88
26	11	1983	C9	0.86
26	11	1983	D5	0.98
26	11	1983	D6	0.76
26	11	1983	D7	0.83
27	11	1983	C1	0.84
27	11	1983	C2	0.76
27	11	1983	C3	0.80
27	11	1983	C4	0.60
27	11	1983	C5	0.90
27	11	1983	C6	0.84
27	11	1983	C7	0.80
27	11	1983	C8	0.88
27	11	1983	C9	0.86
27	11	1983	D5	0.86
27	11	1983	D6	0.94
27	11	1983	D7	0.80
28	11	1983	C1	0.84
28	11	1983	C2	0.77
28	11	1983	C3	0.79
28	11	1983	C4	0.78
28	11	1983	C5	0.88
28	11	1983	C6	0.81
28	11	1983	C7	0.94
28	11	1983	C8	0.84
28	11	1983	C9	0.86
28	11	1983	D5	0.96
28	11	1983	D6	0.81
28	11	1983	D7	0.78
29	11	1983	C1	0.92
29	11	1983	C2	0.88
29	11	1983	C3	0.87
29	11	1983	C4	0.70
29	11	1983	C5	0.90
29	11	1983	C6	0.84
29	11	1983	C7	0.92
29	11	1983	C8	0.95
29	11	1983	C9	0.96
29	11	1983	D5	0.82
29	11	1983	D6	0.84
29	11	1983	D7	0.73
30	11	1983	C1	0.83
30	11	1983	C2	0.76
30	11	1983	C3	0.76
30	11	1983	C4	0.70
30	11	1983	C5	0.92
30	11	1983	C6	0.91
30	11	1983	C7	0.91
30	11	1983	C8	0.83
30	11	1983	C9	0.90
30	11	1983	D5	0.80
30	11	1983	D6	0.76
30	11	1983	D7	0.70
1	12	1983	C1	0.74
1	12	1983	C2	0.70
1	12	1983	C3	0.72
1	12	1983	C4	0.73
1	12	1983	C5	0.76
1	12	1983	C6	0.77

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DATE			POND	POND DEPTH
DAY	MONTH	YEAR		m
XX	XX	XXXX		X.XX
1	12	1983	C7	0.84
1	12	1983	C8	0.86
1	12	1983	C9	0.80
1	12	1983	D5	0.85
1	12	1983	D6	0.80
1	12	1983	D7	0.74
2	12	1983	C1	0.76
2	12	1983	C2	0.74
2	12	1983	C3	0.80
2	12	1983	C4	0.86
2	12	1983	C5	0.80
2	12	1983	C6	0.85
2	12	1983	C7	0.92
2	12	1983	C8	0.81
2	12	1983	C9	0.82
2	12	1983	D5	0.84
2	12	1983	D6	0.83
2	12	1983	D7	0.74
3	12	1983	C1	0.74
3	12	1983	C2	0.72
3	12	1983	C3	0.82
3	12	1983	C4	0.80
3	12	1983	C5	0.78
3	12	1983	C6	0.70
3	12	1983	C7	0.86
3	12	1983	C8	0.76
3	12	1983	C9	0.78
3	12	1983	D5	0.84
3	12	1983	D6	0.77
3	12	1983	D7	0.72
4	12	1983	C1	0.70
4	12	1983	C2	0.71
4	12	1983	C3	0.73
4	12	1983	C4	0.74
4	12	1983	C5	0.78
4	12	1983	C6	0.80
4	12	1983	C7	0.81
4	12	1983	C8	0.94
4	12	1983	C9	0.76
4	12	1983	D5	0.80
4	12	1983	D6	0.74
4	12	1983	D7	0.75
5	12	1983	C1	0.84
5	12	1983	C2	0.68
5	12	1983	C3	0.84
5	12	1983	C4	0.80
5	12	1983	C5	0.74
5	12	1983	C6	0.64
5	12	1983	C7	0.80
5	12	1983	C8	0.70
5	12	1983	C9	0.83
5	12	1983	D5	0.99
5	12	1983	D6	0.70
5	12	1983	D7	0.68
6	12	1983	C1	0.78
6	12	1983	C2	0.64
6	12	1983	C3	0.81
6	12	1983	C4	0.70
6	12	1983	C5	0.62
6	12	1983	C6	0.56
6	12	1983	C7	0.78
6	12	1983	C8	0.62
6	12	1983	C9	0.66
6	12	1983	D5	0.74
6	12	1983	D6	0.70
6	12	1983	D7	0.60
7	12	1983	C1	0.70
7	12	1983	C2	0.64
7	12	1983	C3	0.74
7	12	1983	C4	0.59
7	12	1983	C5	0.49
7	12	1983	C6	0.55
7	12	1983	C7	0.75
7	12	1983	C8	0.61
7	12	1983	C9	0.60
7	12	1983	D5	0.60
7	12	1983	D6	0.68
7	12	1983	D7	0.64
8	12	1983	C1	0.62
8	12	1983	C2	0.60
8	12	1983	C3	0.68
8	12	1983	C4	0.52
8	12	1983	C5	0.44
8	12	1983	C6	0.48
8	12	1983	C7	0.64
8	12	1983	C8	0.50
8	12	1983	C9	0.51
8	12	1983	D5	0.58
8	12	1983	D6	0.66
8	12	1983	D7	0.70
9	12	1983	C1	0.54
9	12	1983	C2	0.51
9	12	1983	C3	0.64
9	12	1983	C4	0.44
9	12	1983	C5	0.46
9	12	1983	C6	0.44
9	12	1983	C7	0.58
9	12	1983	C8	0.48
9	12	1983	C9	0.46
9	12	1983	D5	0.66
9	12	1983	D6	0.62
9	12	1983	D7	0.60
10	12	1983	C1	0.56
10	12	1983	C2	0.51
10	12	1983	C3	0.62
10	12	1983	C4	0.56
10	12	1983	C5	0.61
10	12	1983	C6	0.50
10	12	1983	C7	0.81
10	12	1983	C8	0.70
10	12	1983	C9	0.71
10	12	1983	D5	0.77
10	12	1983	D6	0.58
10	12	1983	D7	0.54
11	12	1983	C1	0.82
11	12	1983	C2	0.64
11	12	1983	C3	0.74
11	12	1983	C4	0.70
11	12	1983	C5	0.62
11	12	1983	C6	0.56
11	12	1983	C7	0.73
11	12	1983	C8	0.68
11	12	1983	C9	0.64
11	12	1983	D5	0.68
11	12	1983	D6	0.70
11	12	1983	D7	0.54
12	12	1983	C1	0.84
12	12	1983	C2	0.64
12	12	1983	C3	0.74
12	12	1983	C4	0.74
12	12	1983	C5	0.80
12	12	1983	C6	0.58
12	12	1983	C7	0.70
12	12	1983	C8	0.62
12	12	1983	C9	0.60
12	12	1983	D5	0.68
12	12	1983	D6	0.65
12	12	1983	D7	0.52
13	12	1983	C1	0.80
13	12	1983	C2	0.71
13	12	1983	C3	0.72
13	12	1983	C4	0.79
13	12	1983	C5	0.75
13	12	1983	C6	0.66
13	12	1983	C7	0.81
13	12	1983	C8	0.80
13	12	1983	C9	0.76

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DATE			POND	POND DEPTH m
DAY XX	MONTH XX	YEAR XXXX		X.XX
13	12	1983	D5	0.78
13	12	1983	D6	0.70
13	12	1983	D7	0.64
14	12	1983	C1	0.88
14	12	1983	C2	0.83
14	12	1983	C3	0.81
14	12	1983	C4	0.85
14	12	1983	C5	0.78
14	12	1983	C6	0.82
14	12	1983	C7	0.90
14	12	1983	C8	0.76
14	12	1983	C9	0.70
14	12	1983	D5	0.92
14	12	1983	D6	0.80
14	12	1983	D7	0.70
15	12	1983	C1	0.95
15	12	1983	C2	0.90
15	12	1983	C3	0.90
15	12	1983	C4	0.86
15	12	1983	C5	0.75
15	12	1983	C6	0.90
15	12	1983	C7	0.92
15	12	1983	C8	0.86
15	12	1983	C9	1.00
15	12	1983	D5	0.98
15	12	1983	D6	0.76
15	12	1983	D7	0.80
16	12	1983	C1	0.85
16	12	1983	C2	0.80
16	12	1983	C3	0.68
16	12	1983	C4	0.86
16	12	1983	C5	0.92
16	12	1983	C6	0.91
16	12	1983	C7	0.90
16	12	1983	C8	0.88
16	12	1983	C9	0.90
16	12	1983	D5	0.92
16	12	1983	D6	0.90
16	12	1983	D7	0.80
17	12	1983	C1	0.80
17	12	1983	C2	0.70
17	12	1983	C3	0.60
17	12	1983	C4	0.76
17	12	1983	C5	0.70
17	12	1983	C6	0.81
17	12	1983	C7	0.84
17	12	1983	C8	0.80
17	12	1983	C9	0.64
17	12	1983	D5	0.98
17	12	1983	D6	0.80
17	12	1983	D7	0.80
18	12	1983	C1	0.80
18	12	1983	C2	0.72
18	12	1983	C3	0.80
18	12	1983	C4	0.81
18	12	1983	C5	0.74
18	12	1983	C6	0.80
18	12	1983	C7	0.96
18	12	1983	C8	0.93
18	12	1983	C9	0.98
18	12	1983	D5	0.84
18	12	1983	D6	0.78
18	12	1983	D7	0.74
19	12	1983	C1	0.86
19	12	1983	C2	0.74
19	12	1983	C3	0.60
19	12	1983	C4	0.74
19	12	1983	C5	0.70
19	12	1983	C6	0.77
19	12	1983	C7	0.87
19	12	1983	C8	0.85
19	12	1983	C9	0.84
19	12	1983	D5	0.94
19	12	1983	D6	0.80
19	12	1983	D7	0.78
20	12	1983	C1	0.86
20	12	1983	C2	0.70
20	12	1983	C3	0.60
20	12	1983	C4	0.72
20	12	1983	C5	0.76
20	12	1983	C6	0.70
20	12	1983	C7	0.86
20	12	1983	C8	0.80
20	12	1983	C9	0.83
20	12	1983	D5	0.90
20	12	1983	D6	0.80
20	12	1983	D7	0.78
21	12	1983	C1	0.85
21	12	1983	C2	0.72
21	12	1983	C3	0.82
21	12	1983	C4	0.88
21	12	1983	C5	0.86
21	12	1983	C6	0.80
21	12	1983	C7	0.80
21	12	1983	C8	0.77
21	12	1983	C9	0.72
21	12	1983	D5	0.80
21	12	1983	D6	0.81
21	12	1983	D7	0.74
22	12	1983	C1	0.80
22	12	1983	C2	0.76
22	12	1983	C3	0.64
22	12	1983	C4	0.81
22	12	1983	C5	0.84
22	12	1983	C6	0.78
22	12	1983	C7	0.88
22	12	1983	C8	0.88
22	12	1983	C9	0.78
22	12	1983	D5	0.80
22	12	1983	D6	0.76
22	12	1983	D7	0.80
23	12	1983	C1	0.82
23	12	1983	C2	0.80
23	12	1983	C3	0.80
23	12	1983	C4	0.92
23	12	1983	C5	0.90
23	12	1983	C6	0.94
23	12	1983	C7	0.90
23	12	1983	C8	0.81
23	12	1983	C9	0.87
23	12	1983	D5	1.00
23	12	1983	D6	0.90
23	12	1983	D7	0.77
24	12	1983	C1	0.93
24	12	1983	C2	0.86
24	12	1983	C3	0.86
24	12	1983	C4	0.86
24	12	1983	C5	0.90
24	12	1983	C6	0.88
24	12	1983	C7	0.86
24	12	1983	C8	0.87
24	12	1983	C9	0.98
24	12	1983	D5	1.00
24	12	1983	D6	0.80
24	12	1983	D7	0.77
25	12	1983	C1	0.82
25	12	1983	C2	0.84
25	12	1983	C3	0.85
25	12	1983	C4	0.84
25	12	1983	C5	0.86
25	12	1983	C6	0.87
25	12	1983	C7	0.83
25	12	1983	C8	0.86
25	12	1983	C9	0.90
25	12	1983	D5	0.95
25	12	1983	D6	0.80
25	12	1983	D7	0.78

Daily Pond Measurements. Bogor, Indonesia, Cycle I, Wet Season

DATE			POND	POND DEPTH
DAY	MONTH	YEAR		m
XX	XX	XXXX		X.XX
26	12	1983	C1	0.82
26	12	1983	C2	0.82
26	12	1983	C3	0.77
26	12	1983	C4	0.82
26	12	1983	C5	0.90
26	12	1983	C6	0.86
26	12	1983	C7	0.91
26	12	1983	C8	0.82
26	12	1983	C9	0.90
26	12	1983	D5	0.88
26	12	1983	D6	0.86
26	12	1983	D7	0.80
27	12	1983	C1	0.85
27	12	1983	C2	0.80
27	12	1983	C3	0.86
27	12	1983	C4	0.80
27	12	1983	C5	0.95
27	12	1983	C6	0.83
27	12	1983	C7	0.84
27	12	1983	C8	0.82
27	12	1983	C9	0.71
27	12	1983	D5	0.96
27	12	1983	D6	0.88
27	12	1983	D7	0.92
28	12	1983	C1	0.88
28	12	1983	C2	0.80
28	12	1983	C3	0.62
28	12	1983	C4	0.92
28	12	1983	C5	0.86
28	12	1983	C6	0.84
28	12	1983	C7	0.80
28	12	1983	C8	0.78
28	12	1983	C9	0.80
28	12	1983	D5	0.90
28	12	1983	D6	0.80
28	12	1983	D7	0.80
29	12	1983	C1	0.85
29	12	1983	C2	0.76
29	12	1983	C3	0.70
29	12	1983	C4	0.80
29	12	1983	C5	0.90
29	12	1983	C6	0.84
29	12	1983	C7	0.76
29	12	1983	C8	0.74
29	12	1983	C9	0.82
29	12	1983	D5	0.90
29	12	1983	D6	0.80
29	12	1983	D7	0.82
30	12	1983	C1	0.88
30	12	1983	C2	0.82
30	12	1983	C3	0.77
30	12	1983	C4	0.70
30	12	1983	C5	0.89
30	12	1983	C6	0.82
30	12	1983	C7	0.86
30	12	1983	C8	0.88
30	12	1983	C9	0.97
30	12	1983	D5	0.88
30	12	1983	D6	0.90
30	12	1983	D7	0.76
31	12	1983	C1	0.81
31	12	1983	C2	0.76
31	12	1983	C3	0.64
31	12	1983	C4	0.58
31	12	1983	C5	0.85
31	12	1983	C6	0.80
31	12	1983	C7	0.84
31	12	1983	C8	0.76
31	12	1983	C9	0.65
31	12	1983	D5	0.78
31	12	1983	D6	0.77
31	12	1983	D7	0.70
1	1	1984	C1	0.85
1	1	1984	C2	0.81
1	1	1984	C3	0.83
1	1	1984	C4	0.90
1	1	1984	C5	0.82
1	1	1984	C6	0.74
1	1	1984	C7	0.86
1	1	1984	C8	0.76
1	1	1984	C9	0.94
1	1	1984	D5	0.81
1	1	1984	D6	0.81
1	1	1984	D7	0.91
2	1	1984	C1	0.90
2	1	1984	C2	0.80
2	1	1984	C3	0.88
2	1	1984	C4	0.80
2	1	1984	C5	0.77
2	1	1984	C6	0.89
2	1	1984	C7	0.88
2	1	1984	C8	0.85
2	1	1984	C9	0.84
2	1	1984	D5	0.86
2	1	1984	D6	0.84
2	1	1984	D7	0.84
3	1	1984	C1	0.88
3	1	1984	C2	0.80
3	1	1984	C3	0.72
3	1	1984	C4	0.80
3	1	1984	C5	0.82
3	1	1984	C6	0.82
3	1	1984	C7	0.92
3	1	1984	C8	0.80
3	1	1984	C9	0.95
3	1	1984	D5	0.88
3	1	1984	D6	0.81
3	1	1984	D7	0.82
4	1	1984	C1	0.90
4	1	1984	C2	0.81
4	1	1984	C3	0.83
4	1	1984	C4	0.80
4	1	1984	C5	0.80
4	1	1984	C6	0.92
4	1	1984	C7	0.92
4	1	1984	C8	0.82
4	1	1984	C9	0.87
4	1	1984	D5	0.90
4	1	1984	D6	0.88
4	1	1984	D7	0.83
5	1	1984	C1	0.96
5	1	1984	C2	0.90
5	1	1984	C3	0.94
5	1	1984	C4	0.80
5	1	1984	C5	0.86
5	1	1984	C6	0.84
5	1	1984	C7	0.86
5	1	1984	C8	0.81
5	1	1984	C9	0.93
5	1	1984	D5	0.90
5	1	1984	D6	0.76
5	1	1984	D7	0.78
6	1	1984	C1	0.90
6	1	1984	C2	0.82
6	1	1984	C3	0.78
6	1	1984	C4	0.85
6	1	1984	C5	0.92
6	1	1984	C6	0.80
6	1	1984	C7	0.84
6	1	1984	C8	0.66
6	1	1984	C9	0.88
6	1	1984	D5	0.84
6	1	1984	D6	0.76
6	1	1984	D7	0.76
7	1	1984	C1	0.92
7	1	1984	C2	0.87
7	1	1984	C3	0.86

TABLE 2

Daily Pond Measurements. Bogor, Indonesia, Cycle I, Wet Season

DATE			POND	POND DEPTH
DAY	MONTH	YEAR		m
XX	XX	XXXX		X.XX
7	1	1984	C4	0.89
7	1	1984	C5	0.92
7	1	1984	C6	0.94
7	1	1984	C7	0.94
7	1	1984	C8	0.86
7	1	1984	C9	0.96
7	1	1984	D5	0.91
7	1	1984	D6	0.80
7	1	1984	D7	0.84
8	1	1984	C1	0.69
8	1	1984	C2	0.78
8	1	1984	C3	0.80
8	1	1984	C4	0.82
8	1	1984	C5	0.86
8	1	1984	C6	0.85
8	1	1984	C7	0.80
8	1	1984	C8	0.85
8	1	1984	C9	0.86
8	1	1984	D5	0.80
8	1	1984	D6	0.80
8	1	1984	D7	0.75
9	1	1984	C1	0.70
9	1	1984	C2	0.80
9	1	1984	C3	0.80
9	1	1984	C4	0.84
9	1	1984	C5	0.87
9	1	1984	C6	0.86
9	1	1984	C7	0.83
9	1	1984	C8	0.84
9	1	1984	C9	0.88
9	1	1984	D5	0.86
9	1	1984	D6	0.80
9	1	1984	D7	0.76
10	1	1984	C1	0.86
10	1	1984	C2	0.80
10	1	1984	C3	0.76
10	1	1984	C4	0.76
10	1	1984	C5	0.90
10	1	1984	C6	0.80
10	1	1984	C7	0.84
10	1	1984	C8	0.76
10	1	1984	C9	0.86
10	1	1984	D5	0.98
10	1	1984	D6	0.76
10	1	1984	D7	0.82
11	1	1984	C1	0.84
11	1	1984	C2	0.86
11	1	1984	C3	0.88
11	1	1984	C4	0.81
11	1	1984	C5	1.00
11	1	1984	C6	0.94
11	1	1984	C7	0.86
11	1	1984	C8	0.85
11	1	1984	C9	0.98
11	1	1984	D5	0.90
11	1	1984	D6	0.84
11	1	1984	D7	0.85
12	1	1984	C1	0.90
12	1	1984	C2	0.86
12	1	1984	C3	0.78
12	1	1984	C4	0.80
12	1	1984	C5	0.84
12	1	1984	C6	0.86
12	1	1984	C7	0.81
12	1	1984	C8	0.75
12	1	1984	C9	0.90
12	1	1984	D5	0.84
12	1	1984	D6	0.80
12	1	1984	D7	0.83
13	1	1984	C1	0.68
13	1	1984	C2	0.82
13	1	1984	C3	0.78
13	1	1984	C4	0.88
13	1	1984	C5	0.93
13	1	1984	C6	0.81
13	1	1984	C7	0.88
13	1	1984	C8	0.88
13	1	1984	C9	0.96
13	1	1984	D5	0.77
13	1	1984	D6	0.81
13	1	1984	D7	0.82
14	1	1984	C1	0.80
14	1	1984	C2	0.72
14	1	1984	C3	0.66
14	1	1984	C4	0.74
14	1	1984	C5	0.86
14	1	1984	C6	0.78
14	1	1984	C7	0.86
14	1	1984	C8	0.78
14	1	1984	C9	0.84
14	1	1984	D5	0.88
14	1	1984	D6	0.77
14	1	1984	D7	0.77
15	1	1984	C1	0.70
15	1	1984	C2	0.72
15	1	1984	C3	0.64
15	1	1984	C4	0.66
15	1	1984	C5	0.80
15	1	1984	C6	0.76
15	1	1984	C7	0.80
15	1	1984	C8	0.75
15	1	1984	C9	0.82
15	1	1984	D5	0.86
15	1	1984	D6	0.75
15	1	1984	D7	0.78
16	1	1984	C1	0.77
16	1	1984	C2	0.80
16	1	1984	C3	0.65
16	1	1984	C4	0.68
16	1	1984	C5	0.87
16	1	1984	C6	0.78
16	1	1984	C7	0.86
16	1	1984	C8	0.77
16	1	1984	C9	0.84
16	1	1984	D5	0.74
16	1	1984	D6	0.76
16	1	1984	D7	0.72
17	1	1984	C1	0.84
17	1	1984	C2	0.84
17	1	1984	C3	0.82
17	1	1984	C4	0.73
17	1	1984	C5	0.98
17	1	1984	C6	0.77
17	1	1984	C7	0.88
17	1	1984	C8	0.78
17	1	1984	C9	0.99
17	1	1984	D5	0.94
17	1	1984	D6	0.80
17	1	1984	D7	0.90
18	1	1984	C1	0.68
18	1	1984	C2	0.65
18	1	1984	C3	0.64
18	1	1984	C4	0.56
18	1	1984	C5	0.80
18	1	1984	C6	0.85
18	1	1984	C7	0.86
18	1	1984	C8	0.88
18	1	1984	C9	0.87
18	1	1984	D5	0.82
18	1	1984	D6	0.76
18	1	1984	D7	0.81
19	1	1984	C1	0.80
19	1	1984	C2	0.84
19	1	1984	C3	0.80
19	1	1984	C4	0.84
19	1	1984	C5	0.96
19	1	1984	C6	0.86

Daily Pond Measurements. Bogor, Indonesia, Cycle I, Wet Season

DATE			POND	POND DEPTH
DAY	MONTH	YEAR		m
XX	XX	XXXX		X.XX
19	1	1984	C7	0.92
19	1	1984	C8	0.80
19	1	1984	C9	0.98
19	1	1984	D5	0.96
19	1	1984	D6	0.84
19	1	1984	D7	0.84
20	1	1984	C1	0.64
20	1	1984	C2	0.74
20	1	1984	C3	0.64
20	1	1984	C4	0.86
20	1	1984	C5	0.86
20	1	1984	C6	0.87
20	1	1984	C7	0.92
20	1	1984	C8	0.80
20	1	1984	C9	0.86
20	1	1984	D5	0.74
20	1	1984	D6	0.76
20	1	1984	D7	0.88
21	1	1984	C1	0.72
21	1	1984	C2	0.78
21	1	1984	C3	0.77
21	1	1984	C4	0.84
21	1	1984	C5	0.89
21	1	1984	C6	0.82
21	1	1984	C7	0.87
21	1	1984	C8	0.86
21	1	1984	C9	0.95
21	1	1984	D5	0.83
21	1	1984	D6	0.74
21	1	1984	D7	0.82
22	1	1984	C1	0.80
22	1	1984	C2	0.70
22	1	1984	C3	0.72
22	1	1984	C4	0.70
22	1	1984	C5	0.75
22	1	1984	C6	0.78
22	1	1984	C7	0.80
22	1	1984	C8	0.70
22	1	1984	C9	0.88
22	1	1984	D5	0.72
22	1	1984	D6	0.70
22	1	1984	D7	0.75
23	1	1984	C1	0.80
23	1	1984	C2	0.76
23	1	1984	C3	0.62
23	1	1984	C4	0.72
23	1	1984	C5	0.81
23	1	1984	C6	0.75
23	1	1984	C7	0.80
23	1	1984	C8	0.74
23	1	1984	C9	0.80
23	1	1984	D5	0.76
23	1	1984	D6	0.74
23	1	1984	D7	0.72
24	1	1984	C1	0.78
24	1	1984	C2	0.78
24	1	1984	C3	0.60
24	1	1984	C4	0.71
24	1	1984	C5	0.78
24	1	1984	C6	0.78
24	1	1984	C7	0.80
24	1	1984	C8	0.81
24	1	1984	C9	0.84
24	1	1984	D5	0.78
24	1	1984	D6	0.75
24	1	1984	D7	0.78
25	1	1984	C1	0.88
25	1	1984	C2	0.70
25	1	1984	C3	0.77
25	1	1984	C4	0.70
25	1	1984	C5	0.78
25	1	1984	C6	0.80
25	1	1984	C7	0.82
25	1	1984	C8	0.72
25	1	1984	C9	0.90
25	1	1984	D5	0.70
25	1	1984	D6	0.74
25	1	1984	D7	0.77
26	1	1984	C1	0.85
26	1	1984	C2	0.75
26	1	1984	C3	0.85
26	1	1984	C4	0.80
26	1	1984	C5	0.84
26	1	1984	C6	0.82
26	1	1984	C7	0.90
26	1	1984	C8	0.88
26	1	1984	C9	0.90
26	1	1984	D5	0.91
26	1	1984	D6	0.80
26	1	1984	D7	0.84
27	1	1984	C1	0.89
27	1	1984	C2	0.79
27	1	1984	C3	0.69
27	1	1984	C4	0.90
27	1	1984	C5	0.98
27	1	1984	C6	0.90
27	1	1984	C7	0.94
27	1	1984	C8	0.88
27	1	1984	C9	0.94
27	1	1984	D5	0.98
27	1	1984	D6	0.78
27	1	1984	D7	0.88
28	1	1984	C1	0.90
28	1	1984	C2	0.82
28	1	1984	C3	0.64
28	1	1984	C4	0.66
28	1	1984	C5	0.86
28	1	1984	C6	0.88
28	1	1984	C7	0.91
28	1	1984	C8	0.81
28	1	1984	C9	0.98
28	1	1984	D5	0.91
28	1	1984	D6	0.74
28	1	1984	D7	0.91
29	1	1984	C1	0.87
29	1	1984	C2	0.76
29	1	1984	C3	0.75
29	1	1984	C4	0.76
29	1	1984	C5	0.90
29	1	1984	C6	0.84
29	1	1984	C7	0.90
29	1	1984	C8	0.76
29	1	1984	C9	0.87
29	1	1984	D5	0.83
29	1	1984	D6	0.74
29	1	1984	D7	0.90
30	1	1984	C1	0.90
30	1	1984	C2	0.77
30	1	1984	C3	0.82
30	1	1984	C4	0.72
30	1	1984	C5	0.86
30	1	1984	C6	0.80
30	1	1984	C7	0.90
30	1	1984	C8	0.90
30	1	1984	C9	0.95
30	1	1984	D5	0.98
30	1	1984	D6	0.78
30	1	1984	D7	0.90
31	1	1984	C1	0.86
31	1	1984	C2	0.72
31	1	1984	C3	0.75
31	1	1984	C4	0.92
31	1	1984	C5	0.92
31	1	1984	C6	0.76
31	1	1984	C7	0.86
31	1	1984	C8	0.90
31	1	1984	C9	0.84

Daily Pond Measurements. Bogor, Indonesia, Cycle I, Wet Season

DATE			POND	POND DEPTH
DAY	MONTH	YEAR		m
XX	XX	XXXX		X.XX
31	1	1984	D5	0.88
31	1	1984	D6	0.78
31	1	1984	D7	0.88
1	2	1984	C1	0.90
1	2	1984	C2	0.80
1	2	1984	C3	0.80
1	2	1984	C4	0.84
1	2	1984	C5	0.80
1	2	1984	C6	0.90
1	2	1984	C7	0.92
1	2	1984	C8	0.82
1	2	1984	C9	0.98
1	2	1984	D5	0.74
1	2	1984	D6	0.77
1	2	1984	D7	0.90
2	2	1984	C1	0.90
2	2	1984	C2	0.83
2	2	1984	C3	0.68
2	2	1984	C4	0.86
2	2	1984	C5	0.86
2	2	1984	C6	0.81
2	2	1984	C7	0.88
2	2	1984	C8	0.78
2	2	1984	C9	0.90
2	2	1984	D5	0.88
2	2	1984	D6	0.76
2	2	1984	D7	0.90
3	2	1984	C1	0.91
3	2	1984	C2	0.86
3	2	1984	C3	0.90
3	2	1984	C4	0.78
3	2	1984	C5	0.78
3	2	1984	C6	0.74
3	2	1984	C7	0.84
3	2	1984	C8	0.85
3	2	1984	C9	0.81
3	2	1984	D5	0.78
3	2	1984	D6	0.77
3	2	1984	D7	0.90
4	2	1984	C1	0.84
4	2	1984	C2	0.74
4	2	1984	C3	0.68
4	2	1984	C4	0.74
4	2	1984	C5	0.74
4	2	1984	C6	0.70
4	2	1984	C7	0.80
4	2	1984	C8	0.82
4	2	1984	C9	0.72
4	2	1984	D5	0.96
4	2	1984	D6	0.73
4	2	1984	D7	0.90
5	2	1984	C1	0.82
5	2	1984	C2	0.71
5	2	1984	C3	0.60
5	2	1984	C4	0.88
5	2	1984	C5	0.80
5	2	1984	C6	0.76
5	2	1984	C7	0.82
5	2	1984	C8	0.74
5	2	1984	C9	0.85
5	2	1984	D5	0.68
5	2	1984	D6	0.75
5	2	1984	D7	0.88
6	2	1984	C1	0.82
6	2	1984	C2	0.62
6	2	1984	C3	0.66
6	2	1984	C4	0.80
6	2	1984	C5	0.76
6	2	1984	C6	0.76
6	2	1984	C7	0.84
6	2	1984	C8	0.75
6	2	1984	C9	0.88
6	2	1984	D5	0.60
6	2	1984	D6	0.75
6	2	1984	D7	0.88
7	2	1984	C1	0.80
7	2	1984	C2	0.76
7	2	1984	C3	0.62
7	2	1984	C4	0.65
7	2	1984	C5	0.84
7	2	1984	C6	0.75
7	2	1984	C7	0.90
7	2	1984	C8	0.70
7	2	1984	C9	0.80
7	2	1984	D5	0.88
7	2	1984	D6	0.76
7	2	1984	D7	0.90
8	2	1984	C1	9.00
8	2	1984	C2	0.66
8	2	1984	C3	0.78
8	2	1984	C4	0.82
8	2	1984	C5	0.78
8	2	1984	C6	0.93
8	2	1984	C7	0.95
8	2	1984	C8	0.80
8	2	1984	C9	0.80
8	2	1984	D5	0.82
8	2	1984	D6	0.75
8	2	1984	D7	0.92
9	2	1984	C1	0.86
9	2	1984	C2	0.64
9	2	1984	C3	0.70
9	2	1984	C4	0.72
9	2	1984	C5	0.82
9	2	1984	C6	0.85
9	2	1984	C7	0.90
9	2	1984	C8	0.76
9	2	1984	C9	0.85
9	2	1984	D5	0.84
9	2	1984	D6	0.76
9	2	1984	D7	0.93
10	2	1984	C1	0.88
10	2	1984	C2	0.72
10	2	1984	C3	0.70
10	2	1984	C4	0.80
10	2	1984	C5	0.83
10	2	1984	C6	0.80
10	2	1984	C7	0.86
10	2	1984	C8	0.82
10	2	1984	C9	0.83
10	2	1984	D5	0.80
10	2	1984	D6	0.81
10	2	1984	D7	0.90
11	2	1984	C1	0.86
11	2	1984	C2	0.70
11	2	1984	C3	0.60
11	2	1984	C4	0.82
11	2	1984	C5	0.78
11	2	1984	C6	0.84
11	2	1984	C7	0.87
11	2	1984	C8	0.82
11	2	1984	C9	0.80
11	2	1984	D5	0.70
11	2	1984	D6	0.72
11	2	1984	D7	0.90
12	2	1984	C1	0.88
12	2	1984	C2	0.76
12	2	1984	C3	0.66
12	2	1984	C4	0.90
12	2	1984	C5	0.84
12	2	1984	C6	0.92
12	2	1984	C7	0.94
12	2	1984	C8	0.95
12	2	1984	C9	0.98
12	2	1984	D5	0.95
12	2	1984	D6	0.74
12	2	1984	D7	0.92

TABLE 2

Daily Pond Measurements. Bogor, Indonesia, Cycle I, Wet Season

DATE			POND	POND DEPTH
DAY	MONTH	YEAR		m
XX	XX	XXXX		X.XX
13	2	1984	C1	0.86
13	2	1984	C2	0.64
13	2	1984	C3	0.70
13	2	1984	C4	0.80
13	2	1984	C5	0.78
13	2	1984	C6	0.85
13	2	1984	C7	0.88
13	2	1984	C8	0.80
13	2	1984	C9	0.82
13	2	1984	D5	0.72
13	2	1984	D6	0.76
13	2	1984	D7	0.90
14	2	1984	C1	0.86
14	2	1984	C2	0.77
14	2	1984	C3	0.72
14	2	1984	C4	0.84
14	2	1984	C5	0.80
14	2	1984	C6	0.82
14	2	1984	C7	0.88
14	2	1984	C8	0.82
14	2	1984	C9	0.87
14	2	1984	D5	0.90
14	2	1984	D6	0.76
14	2	1984	D7	0.92
15	2	1984	C1	0.86
15	2	1984	C2	0.66
15	2	1984	C3	0.76
15	2	1984	C4	0.78
15	2	1984	C5	0.79
15	2	1984	C6	0.76
15	2	1984	C7	0.86
15	2	1984	C8	0.74
15	2	1984	C9	0.86
15	2	1984	D5	0.78
15	2	1984	D6	0.72
15	2	1984	D7	0.90
16	2	1984	C1	0.90
16	2	1984	C2	0.89
16	2	1984	C3	0.79
16	2	1984	C4	0.88
16	2	1984	C5	0.90
16	2	1984	C6	0.96
16	2	1984	C7	0.90
16	2	1984	C8	0.82
16	2	1984	C9	0.98
16	2	1984	D5	0.94
16	2	1984	D6	0.88
16	2	1984	D7	0.94
17	2	1984	C1	0.94
17	2	1984	C2	0.92
17	2	1984	C3	0.83
17	2	1984	C4	0.90
17	2	1984	C5	0.92
17	2	1984	C6	0.96
17	2	1984	C7	0.93
17	2	1984	C8	0.85
17	2	1984	C9	0.98
17	2	1984	D5	0.90
17	2	1984	D6	0.88
17	2	1984	D7	0.95
18	2	1984	C1	0.86
18	2	1984	C2	0.78
18	2	1984	C3	0.74
18	2	1984	C4	0.90
18	2	1984	C5	0.95
18	2	1984	C6	0.84
18	2	1984	C7	0.90
18	2	1984	C8	0.84
18	2	1984	C9	0.86
18	2	1984	D5	0.82
18	2	1984	D6	0.80
18	2	1984	D7	0.91
19	2	1984	C1	0.90
19	2	1984	C2	0.80
19	2	1984	C3	0.86
19	2	1984	C4	0.94
19	2	1984	C5	0.76
19	2	1984	C6	0.80
19	2	1984	C7	0.90
19	2	1984	C8	0.76
19	2	1984	C9	0.86
19	2	1984	D5	0.74
19	2	1984	D6	0.76
19	2	1984	D7	0.92
20	2	1984	C1	0.86
20	2	1984	C2	0.76
20	2	1984	C3	0.70
20	2	1984	C4	0.86
20	2	1984	C5	0.88
20	2	1984	C6	0.84
20	2	1984	C7	0.93
20	2	1984	C8	0.83
20	2	1984	C9	0.90
20	2	1984	D5	0.94
20	2	1984	D6	0.78
20	2	1984	D7	0.94
21	2	1984	C1	0.84
21	2	1984	C2	0.84
21	2	1984	C3	0.74
21	2	1984	C4	0.82
21	2	1984	C5	0.76
21	2	1984	C6	0.85
21	2	1984	C7	0.92
21	2	1984	C8	0.74
21	2	1984	C9	0.86
21	2	1984	D5	0.78
21	2	1984	D6	0.82
21	2	1984	D7	0.94
22	2	1984	C1	0.86
22	2	1984	C2	0.80
22	2	1984	C3	0.72
22	2	1984	C4	0.78
22	2	1984	C5	0.76
22	2	1984	C6	0.80
22	2	1984	C7	0.90
22	2	1984	C8	0.86
22	2	1984	C9	0.92
22	2	1984	D5	0.75
22	2	1984	D6	0.82
22	2	1984	D7	0.92
23	2	1984	C1	0.81
23	2	1984	C2	0.72
23	2	1984	C3	0.80
23	2	1984	C4	0.83
23	2	1984	C5	0.94
23	2	1984	C6	0.78
23	2	1984	C7	0.92
23	2	1984	C8	0.74
23	2	1984	C9	0.78
23	2	1984	D5	0.96
23	2	1984	D6	0.88
23	2	1984	D7	0.94
24	2	1984	C1	0.76
24	2	1984	C2	0.56
24	2	1984	C3	0.58
24	2	1984	C4	0.70
24	2	1984	C5	0.74
24	2	1984	C6	0.76
24	2	1984	C7	0.88
24	2	1984	C8	0.76
24	2	1984	C9	0.80
24	2	1984	D5	0.66
24	2	1984	D6	0.76
24	2	1984	D7	0.90
25	2	1984	C1	0.72
25	2	1984	C2	0.62
25	2	1984	C3	0.78

Daily Pond Measurements. Bogor, Indonesia, Cycle I, Wet Season

DATE			POND	POND DEPTH
DAY	MONTH	YEAR		m
XX	XX	XXXX		X.XX
25	2	1984	C4	0.78
25	2	1984	C5	0.88
25	2	1984	C6	0.73
25	2	1984	C7	0.87
25	2	1984	C8	0.78
25	2	1984	C9	0.86
25	2	1984	D5	0.93
25	2	1984	D6	0.72
25	2	1984	D7	0.91
26	2	1984	C1	0.70
26	2	1984	C2	0.62
26	2	1984	C3	0.74
26	2	1984	C4	0.80
26	2	1984	C5	0.90
26	2	1984	C6	0.76
26	2	1984	C7	0.84
26	2	1984	C8	0.76
26	2	1984	C9	0.90
26	2	1984	D5	0.90
26	2	1984	D6	0.74
26	2	1984	D7	0.78
27	2	1984	C1	0.70
27	2	1984	C2	0.50
27	2	1984	C3	0.58
27	2	1984	C4	0.80
27	2	1984	C5	0.74
27	2	1984	C6	0.86
27	2	1984	C7	0.92
27	2	1984	C8	0.80
27	2	1984	C9	0.78
27	2	1984	D5	0.56
27	2	1984	D6	0.70
27	2	1984	D7	0.94
28	2	1984	C1	0.88
28	2	1984	C2	0.66
28	2	1984	C3	0.66
28	2	1984	C4	0.72
28	2	1984	C5	0.76
28	2	1984	C6	0.80
28	2	1984	C7	0.90
28	2	1984	C8	0.76
28	2	1984	C9	0.70
28	2	1984	D5	0.70
28	2	1984	D6	0.74
28	2	1984	D7	0.92
29	2	1984	C1	0.82
29	2	1984	C2	0.60
29	2	1984	C3	0.62
29	2	1984	C4	0.75
29	2	1984	C5	0.76
29	2	1984	C6	0.76
29	2	1984	C7	0.84
29	2	1984	C8	0.60
29	2	1984	C9	0.70
29	2	1984	D5	0.56
29	2	1984	D6	0.73
29	2	1984	D7	0.92
1	3	1984	C1	0.80
1	3	1984	C2	0.70
1	3	1984	C3	0.70
1	3	1984	C4	0.82
1	3	1984	C5	0.85
1	3	1984	C6	0.76
1	3	1984	C7	0.85
1	3	1984	C8	0.84
1	3	1984	C9	0.88
1	3	1984	D5	0.84
1	3	1984	D6	0.74
1	3	1984	D7	0.94
2	3	1984	C1	0.83
2	3	1984	C2	0.74
2	3	1984	C3	0.74
2	3	1984	C4	0.78
2	3	1984	C5	0.92
2	3	1984	C6	0.84
2	3	1984	C7	0.86
2	3	1984	C8	0.70
2	3	1984	C9	0.88
2	3	1984	D5	0.96
2	3	1984	D6	0.76
2	3	1984	D7	0.92
3	3	1984	C1	0.80
3	3	1984	C2	0.66
3	3	1984	C3	0.62
3	3	1984	C4	0.52
3	3	1984	C5	0.80
3	3	1984	C6	0.80
3	3	1984	C7	0.88
3	3	1984	C8	0.72
3	3	1984	C9	0.90
3	3	1984	D5	0.89
3	3	1984	D6	0.76
3	3	1984	D7	0.92
5	3	1984	C1	0.80
5	3	1984	C2	0.76
5	3	1984	C3	0.80
5	3	1984	C4	0.78
5	3	1984	C5	0.80
5	3	1984	C6	0.76
5	3	1984	C7	0.86
5	3	1984	C8	0.84
5	3	1984	C9	0.80
5	3	1984	D5	0.94
5	3	1984	D6	0.78
5	3	1984	D7	0.90
6	3	1984	C1	0.86
6	3	1984	C2	0.70
6	3	1984	C3	0.76
6	3	1984	C4	0.84
6	3	1984	C5	0.82
6	3	1984	C6	0.80
6	3	1984	C7	0.85
6	3	1984	C8	0.91
6	3	1984	C9	0.87
6	3	1984	D5	0.92
6	3	1984	D6	0.78
6	3	1984	D7	0.90
7	3	1984	C1	0.86
7	3	1984	C2	0.70
7	3	1984	C3	0.74
7	3	1984	C4	0.93
7	3	1984	C5	0.90
7	3	1984	C6	0.91
7	3	1984	C7	0.90
7	3	1984	C8	0.86
7	3	1984	C9	0.94
7	3	1984	D5	0.96
7	3	1984	D6	0.80
7	3	1984	D7	0.94
8	3	1984	C1	0.90
8	3	1984	C2	0.84
8	3	1984	C3	0.85
8	3	1984	C4	0.86
8	3	1984	C5	0.86
8	3	1984	C6	0.92
8	3	1984	C7	0.88
8	3	1984	C8	0.88
8	3	1984	C9	0.98
8	3	1984	D5	0.92
8	3	1984	D6	0.80
8	3	1984	D7	0.90
9	3	1984	C1	0.90
9	3	1984	C2	0.78
9	3	1984	C3	0.80
9	3	1984	C4	0.84
9	3	1984	C5	0.88
9	3	1984	C6	0.88

Daily Pond Measurements. Bogor, Indonesia, Cycle I, Wet Season

DATE			POND	POND DEPTH
DAY	MONTH	YEAR		m
XX	XX	XXXX		X.XX
9	3	1984	C7	0.88
9	3	1984	C8	0.84
9	3	1984	C9	0.98
9	3	1984	D5	0.90
9	3	1984	D6	0.76
9	3	1984	D7	0.90
10	3	1984	C1	0.85
10	3	1984	C2	0.56
10	3	1984	C3	0.66
10	3	1984	C4	0.81
10	3	1984	C5	0.80
10	3	1984	C6	0.84
10	3	1984	C7	0.84
10	3	1984	C8	0.88
10	3	1984	C9	0.90
10	3	1984	D5	0.90
10	3	1984	D6	0.70
10	3	1984	D7	0.98
11	3	1984	C1	0.84
11	3	1984	C2	0.66
11	3	1984	C3	0.60
11	3	1984	C4	0.88
11	3	1984	C5	0.86
11	3	1984	C6	0.87
11	3	1984	C7	0.90
11	3	1984	C8	0.84
11	3	1984	C9	0.91
11	3	1984	D5	0.92
11	3	1984	D6	0.78
11	3	1984	D7	0.92
12	3	1984	C1	0.82
12	3	1984	C2	0.86
12	3	1984	C3	0.80
12	3	1984	C4	0.82
12	3	1984	C5	0.88
12	3	1984	C6	0.86
12	3	1984	C7	0.94
12	3	1984	C8	0.80
12	3	1984	C9	0.92
12	3	1984	D5	0.98
12	3	1984	D6	0.84
12	3	1984	D7	0.92
13	3	1984	C1	0.81
13	3	1984	C2	0.84
13	3	1984	C3	0.81
13	3	1984	C4	0.80
13	3	1984	C5	0.87
13	3	1984	C6	0.87
13	3	1984	C7	0.92
13	3	1984	C8	0.81
13	3	1984	C9	0.93
13	3	1984	D5	0.96
13	3	1984	D6	0.85
13	3	1984	D7	0.91
14	3	1984	C1	0.84
14	3	1984	C2	0.77
14	3	1984	C3	0.80
14	3	1984	C4	0.82
14	3	1984	C5	0.90
14	3	1984	C6	0.88
14	3	1984	C7	0.94
14	3	1984	C8	0.86
14	3	1984	C9	0.86
14	3	1984	D5	0.86
14	3	1984	D6	0.82
14	3	1984	D7	0.90
15	3	1984	C1	0.94
15	3	1984	C2	0.88
15	3	1984	C3	0.78
15	3	1984	C4	0.90
15	3	1984	C5	0.92
15	3	1984	C6	0.82
15	3	1984	C7	0.92
15	3	1984	C8	0.82
15	3	1984	C9	0.90
15	3	1984	D5	0.87
15	3	1984	D6	0.80
15	3	1984	D7	0.92
16	3	1984	C1	0.93
16	3	1984	C2	0.89
16	3	1984	C3	0.80
16	3	1984	C4	0.92
16	3	1984	C5	0.91
16	3	1984	C6	0.82
16	3	1984	C7	0.94
16	3	1984	C8	0.84
16	3	1984	C9	0.92
16	3	1984	D5	0.88
16	3	1984	D6	0.82
16	3	1984	D7	0.90
17	3	1984	C1	0.83
17	3	1984	C2	0.79
17	3	1984	C3	0.62
17	3	1984	C4	0.79
17	3	1984	C5	0.81
17	3	1984	C6	0.85
17	3	1984	C7	0.89
17	3	1984	C8	0.82
17	3	1984	C9	0.91
17	3	1984	D5	0.99
17	3	1984	D6	0.76
17	3	1984	D7	0.93
18	3	1984	C1	0.84
18	3	1984	C2	0.88
18	3	1984	C3	0.64
18	3	1984	C4	0.82
18	3	1984	C5	0.76
18	3	1984	C6	0.84
18	3	1984	C7	0.88
18	3	1984	C8	0.84
18	3	1984	C9	0.99
18	3	1984	D5	0.92
18	3	1984	D6	0.74
18	3	1984	D7	0.80
19	3	1984	C1	0.90
19	3	1984	C2	0.80
19	3	1984	C3	0.75
19	3	1984	C4	0.91
19	3	1984	C5	0.94
19	3	1984	C6	0.92
19	3	1984	C7	0.86
19	3	1984	C8	0.82
19	3	1984	C9	0.96
19	3	1984	D5	0.98
19	3	1984	D6	0.86
19	3	1984	D7	0.94
20	3	1984	C1	0.94
20	3	1984	C2	0.89
20	3	1984	C3	0.84
20	3	1984	C4	0.92
20	3	1984	C5	0.94
20	3	1984	C6	0.90
20	3	1984	C7	0.94
20	3	1984	C8	0.90
20	3	1984	C9	0.99
20	3	1984	D5	0.72
20	3	1984	D6	0.82
20	3	1984	D7	0.93

Weekly and Twice Weekly Measurements. Bogor, Indonesia, Cycle I, Wet Season

DATE			EXTRA		D.O.	OXYGEN			POND TEMP.			MAX TEMP		MIN TEMP		ALKA	T.HARD		KJELDAHL	AMMONIA			TOTAL	TOTAL	ORTHO	S.DISK		CHLOROPHYLL		
			DATA?	POND	SAMPLE	TOP	MID	BOT	TOP	MID	BOT	TOP	BOT	TOP	BOT				N	N	NO2-N	NO3-N	NO2&3-N	P	PO4-P	A	B	a	b	c
DAY	MONTH	YEAR			TIME	mg/l	mg/l	mg/l	deg C	deg C	deg C	deg C	deg C	deg C	deg C	CaCO3	CaCO3	pH	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	cm	cm	mg/m3	mg/m3	mg/m3
XX	XX	XXXX	Y or N		XXXX	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XXX	XXX	XX.X	X.XX	X.XX	X.XX	X.XX	XX.XX	X.XX	X.XX	XX	XX	XXXX	XXXX	XXXX
2	11	1983		C1	1000	7.6	6.1	5.5	28.1	27.8	27.6					24	25	6.6												
2	11	1983		C2	1000	6.4	5.6	5.1	28.7	28.0	27.8					28	31	6.7												
2	11	1983		C3	1000	7.6	5.6	5.6	27.6	27.3	27.2					27	26	7.6												
2	11	1983		C4	1000	7.2	6.2	5.9	29.1	28.3	28.1					21	22	6.9												
2	11	1983		C5	1000	7.5	7.2	7.1	28.6	28.2	28.1					19	21	6.9												
2	11	1983		C6	1000	8.0	6.2	5.7	29.0	27.8	27.7					20	22	6.9												
2	11	1983		C7	1000	6.6	6.0	5.7	28.1	27.1	26.6					19	19	6.9												
2	11	1983		C8	1000	7.0	5.6	5.4	27.8	27.1	27.0					19	20	6.9												
2	11	1983		C9	1000	6.4	5.6	5.4	27.9	27.4	27.1					18	18	6.9												
2	11	1983		D5	1000	6.9	5.8	5.5	27.9	27.1	26.8					19	18	6.9												
2	11	1983		D6	1000	6.8	5.2	5.1	28.2	27.3	26.9					18	17	6.9												
2	11	1983		D7	1000	6.5	5.6	5.3	28.4	27.4	27.2					23	25	7.0												
5	11	1983		C1																						31	32			
5	11	1983		C2																						35	35			
5	11	1983		C3																						35	35			
5	11	1983		C4								32.8	30.6	26.7	25.6											25	27			
5	11	1983		C5								34.4	35.6	27.2	27.2											25	25			
5	11	1983		C6								35.0	33.3	26.7	27.2											30	30			
5	11	1983		C7																						30	30			
5	11	1983		C8																						30	28			
5	11	1983		C9																						30	30			
5	11	1983		D5																						25	25			
5	11	1983		D6																						33	30			
5	11	1983		D7																						35	35			
8	11	1983		C1	800	8.6	7.5	6.9	28.5	27.8	27.6							8.3								35	35			
8	11	1983		C2	800	7.7	6.8	6.1	28.5	27.9	27.8							8.1								40	35			
8	11	1983		C3	800	7.4	6.7	6.7	27.7	27.4	27.3							7.6								35	32			
8	11	1983		C4	800	8.1	6.3	6.3	28.2	27.5	27.4	33.9	30.6	27.2	26.7			7.5								27	28			
8	11	1983		C5	800	9.2	8.4	8.4	28.0	27.7	27.6	33.9	28.9	27.2	27.8			7.4								28	28			
8	11	1983		C6	800	9.4	8.1	8.1	28.4	28.2	28.1	33.3	30.6	27.8	27.8			7.4								34	37			
8	11	1983		C7	800	10.1	9.0	9.0	28.1	27.6	27.4							7.6								29	30	22		
8	11	1983		C8	800	9.5	7.2	7.2	28.5	28.0	27.8							8.3								30	27	89		
8	11	1983		C9	800	9.1	7.2	7.2	27.9	27.5	27.4							7.7								30	31	22		
8	11	1983		D5	800	11.4	7.7	7.7	28.2	27.6	27.4							9.0								23	27	62		
8	11	1983		D6	800	9.5	8.1	8.1	28.4	27.8	27.5							8.5								30	32	4		
8	11	1983		D7	800	10.2	7.7	7.7	28.4	27.8	27.6							8.2								35	37			
11	11	1983		C1																						35	37	62		
11	11	1983		C2																						35	40			
11	11	1983		C3																						32	30	49		
11	11	1983		C4																						28	35	9		
11	11	1983		C5																						28	28	4		
11	11	1983		C6																						37	40	27		
11	11	1983		C7																						30	44			
11	11	1983		C8																						27	27			
11	11	1983		C9																						31	38			
11	11	1983		D5																						27	26			
11	11	1983		D6																						32	32			
11	11	1983		D7																						37	35	27		
14	11	1983		C1	800	8.8	7.2	6.7	28.5	27.9	27.7							8.0								34	35	4		

Weekly and Twice Weekly Measurements. Bogor, Indonesia, Cycle I, Wet Season

DATE			EXTRA		D.O.	OXYGEN			POND TEMP.			MAX TEMP		MIN TEMP		ALKA	T.HARD		KJELDAHL	AMMONIA			TOTAL	TOTAL	ORTHO	S.DISK		CHLOROPHYLL		
DAY	MONTH	YEAR	DATA?	POND	SAMPLE TIME	TOP	MID	BOT	TOP	MID	BOT	TOP	BOT	TOP	BOT				N	N	NO2-N	NO3-N	NO2&3-N	P	PO4-P	A	B	a	b	c
						mg/l	mg/l	mg/l	deg C	deg C	deg C	deg C	deg C	deg C	deg C	mg/l	mg/l		mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	cm	cm	mg/m3	mg/m3	mg/m3
XX	XX	XXXX	Y or N		XXXX	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XXX	XXX	XX.X	X.XX	X.XX	X.XX	X.XX	XX.XX	X.XX	X.XX	XX	XX	XXXX	XXXX	XX.X
14	11	1983		C2	900	7.6	6.8	5.2	29.2	28.5	28.4							8.4							38	42	22		
14	11	1983		C3	800	7.6	7.0	6.9	28.1	27.8	27.7							7.9							38	42	45		
14	11	1983		C4	900	10.0	9.2	9.1	28.8	28.5	28.4	35.0	31.1	27.2	26.7			8.5							38	42	53		
14	11	1983		C5	800	8.8	8.5	8.3	28.7	28.4	28.3	34.4	28.9	27.8	27.8			8.3							45	45	4		
14	11	1983		C6	800	12.1	11.8	10.3	29.4	29.0	28.8	33.9	31.7	26.1	27.8			8.2							46	48	26		
14	11	1983		C7	800	9.6	8.6	8.2	28.8	28.4	28.2							8.3							39	39			
14	11	1983		C8	800	9.0	7.7	7.5	28.4	28.1	28.0							8.1							35	40			
14	11	1983		C9	800	9.5	9.1	8.5	28.9	28.5	28.3							8.1							42	45			
14	11	1983		D5	800	10.2	9.4	9.5	29.3	28.9	28.8							8.5							43	45			
14	11	1983		D6	800	9.9	8.7	8.1	29.3	28.6	28.2							8.3							42	42			
14	11	1983		D7	800	9.9	8.8	8.3	29.4	28.7	28.6							8.5							35	36			
19	11	1983		C1																					30	30			
19	11	1983		C2																					29	28			
19	11	1983		C3																					31	30			
19	11	1983		C4																					31	34			
19	11	1983		C5																					30	33			
19	11	1983		C6																					29	31			
19	11	1983		C7																					35	33	76		
19	11	1983		C8																					37	37	13		
19	11	1983		C9																					32	35	67		
19	11	1983		D5																					27	27	4		
19	11	1983		D6																					30	28	31		
19	11	1983		D7																					34	33	4		
22	11	1983		C1	800	7.6	6.7	6.7	27.4	27.1	27.1							7.3							28	29	93		
22	11	1983		C2	800	7.5	6.9	6.2	27.1	26.7	26.7							6.7							26	26	85		
22	11	1983		C3	800	6.1	5.2	5.2	27.1	26.7	26.7							6.6							27	28	4		
22	11	1983		C4	800	7.5	7.0	6.9	26.7	27.2	27.2	32.2	31.1	27.2	27.2			6.5							32	32	67		
22	11	1983		C5	800	7.7	7.4	7.3	27.5	27.3	27.3	34.4	27.8	27.2	27.8			6.8							34	34	9		
22	11	1983		C6	800	10.0	8.8	8.4	27.6	27.4	27.3	33.3	32.2	26.1	27.8			8.0							33	33			
22	11	1983		C7	800	7.1	6.6	6.5	27.6	27.4	27.3							7.4							39	40			
22	11	1983		C8	800	7.1	6.4	6.1	27.6	27.3	27.2							7.1							37	37			
22	11	1983		C9	800	6.6	6.0	5.8	27.5	27.3	27.1							6.9							41	41			
22	11	1983		D5	800	7.1	6.4	6.3	27.5	27.3	27.2							6.8							35	35			
22	11	1983		D6	800	7.3	5.9	5.9	27.8	27.2	27.0							6.8							33	35			
22	11	1983		D7	800	6.6	5.8	5.7	27.9	27.7	27.5							6.8							36	36			
25	11	1983		C1																					29	27			
25	11	1983		C2																					26	26			
25	11	1983		C3																					30	30			
25	11	1983		C4																					30	30			
25	11	1983		C5																					27	30			
25	11	1983		C6																					28	28	53		
25	11	1983		C7																					31	31	80		
25	11	1983		C8																					31	31	4		
25	11	1983		C9																					35	34	18		
25	11	1983		D5																					29	29	9		
25	11	1983		D6																					31	30	13		
25	11	1983		D7																					30	30	22		
29	11	1983		C1																					28	30	45		
29	11	1983		C2																					32	34	18		

Weekly and Twice Weekly Measurements. Bogor, Indonesia, Cycle I, Wet Season

DATE			EXTRA DATA?	POND	D.O. SAMPLE	OXYGEN			FOND TEMP.			MAX TEMP		MIN TEMP		ALKA	T.HARD	pH	KJELDAHL	AMMONIA	NO2-N	NO3-N	TOTAL NO2&3-N	TOTAL P	ORTHO PO4-P	S.DISK		CHLOROPHYLL		
						TOP	MID	BOT	TOP	MID	BOT	TOP	BOT	TOP	BOT				N	N	NO2-N	NO3-N	NO2&3-N	P	PO4-P	A	B	a	b	c
DAY	MONTH	YEAR			TIME	mg/l	mg/l	mg/l	deg C	deg C	deg C	deg C	deg C	deg C	deg C	CaCO3	CaCO3		mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	cm	cm	mg/m3	mg/m3	mg/m3
XX	XX	XXXX	Y or N		XXXX	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XXX	XXX	XX.X	X.XX	X.XX	X.XX	X.XX	XX.XX	X.XX	X.XX	XX	XX	XXXX	XXXX	XXXX
29	11	1983		C3																						32	32	4		
29	11	1983		C4								33.3	28.9	22.2	25.6											26	27	13		
29	11	1983		C5								32.2	27.8	26.7	27.2											29	30	22		
29	11	1983		C6								31.1	29.4	26.7	27.2											35	36	18		
29	11	1983		C7																						34	35			
29	11	1983		C8																						35	35			
29	11	1983		C9																						38	38			
29	11	1983		D5																						35	35			
29	11	1983		D6																						35	35			
29	11	1983		D7																						32	32			
30	11	1983		C1	800	7.8	7.1	6.8	27.4	27.2	27.0							8.1												
30	11	1983		C2	800	7.4	6.8	6.7	27.4	27.2	27.2							8.3												
30	11	1983		C3	800	7.1	6.3	6.2	27.4	27.2	27.1							7.4												
30	11	1983		C4	800	5.9	5.7	5.7	26.1	25.9	25.9							7.1												
30	11	1983		C5	800	7.2	6.5	6.4	27.4	26.8	26.7							7.3												
30	11	1983		C6	800	9.8	9.0	8.7	27.9	27.6	27.5							8.8												
30	11	1983		C7	800	10.3	9.4	8.9	27.8	27.5	27.4							8.6												
30	11	1983		C8	800	8.7	7.8	7.5	27.4	27.3	27.0							7.6												
30	11	1983		C9	800	6.5	6.2	5.8	27.5	27.4	27.3							7.5												
30	11	1983		D5	800	7.3	6.9	6.9	27.4	27.2	27.1							7.7												
30	11	1983		D6	800	9.5	8.5	8.2	27.5	27.3	27.1							7.8												
30	11	1983		D7	800	7.4	6.9	6.7	27.7	27.5	27.5							7.2												
1	12	1983		C1												30	19									31	31			
1	12	1983		C2												25	20									36	38			
1	12	1983		C3												24	20									34	34			
1	12	1983		C4												22	19									30	30			
1	12	1983		C5												22	19									25	25			
1	12	1983		C6												23	19									25	27			
1	12	1983		C7												22	16									25	26	13		
1	12	1983		C8												22	18									25	24	49		
1	12	1983		C9												20	18									37	37	31		
1	12	1983		D5												20	18									25	25	22		
1	12	1983		D6												21	18									29	29	9		
1	12	1983		D7												22	19									40	37	22		
7	12	1983		C1	800	7.8	7.1	7.1	27.6	27.2	27.2							8.6								40	40	9		
7	12	1983		C2	800	7.3	6.6	6.6	27.0	26.8	26.7							8.1								35	35	22		
7	12	1983		C3	800	7.2	6.8	6.8	27.5	27.2	27.2							8.2								35	35	18		
7	12	1983		C4	800	8.2	7.9	7.9	27.4	27.3	27.3	33.3	30.6	26.1	25.6			8.6								30	35	18		
7	12	1983		C5	800	8.5	8.5	8.5	27.2	27.2	27.2		27.8		26.7			8.5								35	35	37		
7	12	1983		C6	800	8.2	7.3	7.3	27.5	27.2	27.2		30.6		26.7			8.8								30	33	37		
7	12	1983		C7	800	10.6	9.7	8.6	27.7	27.1	27.0							9.1								35	37			
7	12	1983		C8	800	8.0	7.4	7.4	27.8	27.4	27.4							8.6								35	35			
7	12	1983		C9	800	8.9	8.8	8.7	27.7	27.5	27.4							8.7								44	45			
7	12	1983		D5	800	8.1	8.1	8.1	27.6	27.2	27.2							8.4								25	26			
7	12	1983		D6	800	8.5	7.4	7.6	28.1	27.2	27.2							8.6								35	34			
7	12	1983		D7	800	7.4	6.9	6.8	27.6	27.3	27.2							8.2								37	36			
13	12	1983		C1	800	5.8	5.0	4.9	28.1	27.8	27.7							6.7								40	38	27		
13	12	1983		C2	800	8.1	6.6	6.5	27.8	27.5	27.4							6.4								35	35	36		
13	12	1983		C3	800	5.6	5.3	5.3	28.4	28.1	28.1							6.4								42	40	36		

Weekly and Twice Weekly Measurements. Bogor, Indonesia, Cycle I, Wet Season

DATE			EXTRA		D.O.	OXYGEN			POND TEMP.			MAX TEMP		MIN TEMP		ALKA	T.HARD		KJELDAHL	AMMONIA			TOTAL	TOTAL	ORTHO	S.DISK		CHLOROPHYLL		
DAY	MONTH	YEAR	DATA?	POND	SAMPLE TIME	TOP	MID	BOT	TOP	MID	BOT	TOP	BOT	TOP	BOT				N	N	NO2-N	NO3-N	NO2&3-N	P	PO4-P	A	B	a	b	c
XX	XX	XXXX	Y or N		XXXX	mg/l XX.X	mg/l XX.X	mg/l XX.X	deg C XX.X	deg C XX.X	deg C XX.X	deg C XX.X	deg C XX.X	deg C XX.X	deg C XX.X	CaCO3 XXX	CaCO3 XXX	pH XX.X	mg/l X.XX	mg/l X.XX	mg/l X.XX	mg/l X.XX	mg/l XX.XX	mg/l X.XX	mg/l X.XX	cm XX	cm XX	mg/m3 XXXX	mg/m3 XXXX	mg/m3 XXXX
13	12	1983		C4	800	6.2	5.4	5.3	28.0	27.7	27.4		32.2		26.6			6.5							33	40	31		
13	12	1983		C5	800	6.3	5.4	5.4	27.3	26.8	26.8				26.7			6.4							30	30	18		
13	12	1983		C6	800	8.3	6.8	6.5	28.2	27.9	27.8		32.8		27.8			6.7							33	34	53		
13	12	1983		C7	800	9.8	8.1	6.9	28.5	28.1	27.7							6.5							35	40			
13	12	1983		C8	800	8.0	6.1	5.5	28.3	27.5	27.3							6.6							30	30			
13	12	1983		C9	800	6.3	5.5	5.1	28.6	27.8	27.6							6.4							33	35			
13	12	1983		D5	800	9.8	7.8	7.6	28.4	27.8	27.7							6.5							25	24			
13	12	1983		D6	800	5.6	4.6	4.5	28.3	28.0	27.8							6.5							34	36			
13	12	1983		D7	800	6.0	5.9	5.8	28.6	28.0	28.0							6.4							35	34			
15	12	1983		C1																					25	25			
15	12	1983		C2																					25	25			
15	12	1983		C3																					27	27			
15	12	1983		C4																					26	27			
15	12	1983		C5																					30	30			
15	12	1983		C6																					26	25			
15	12	1983		C7																					26	27	13		
15	12	1983		C8																					26	26	9		
15	12	1983		C9																					24	25	27		
15	12	1983		D5																					22	20	9		
15	12	1983		D6																					28	28	31		
15	12	1983		D7																					30	31	80		
21	12	1983		C1	800	6.3	6.1	5.6	29.0	28.9	28.6							7.7							35	35	40		
21	12	1983		C2	800	6.2	5.6	5.5	28.6	28.1	28.0							7.6							30	30	76		
21	12	1983		C3	800	6.6	5.3	5.0	28.5	27.9	27.7							7.6							30	30	27		
21	12	1983		C4	800	6.7	6.1	5.8	28.7	28.5	28.4	33.9	32.2	26.7	26.1			7.6							29	29	31		
21	12	1983		C5	800	6.9	6.1	6.0	28.8	28.4	28.2	33.9	27.2	32.2	27.2			7.6							29	25	62		
21	12	1983		C6	800	7.2	6.9	6.3	29.5	29.1	29.0	34.4	31.1	28.3	27.8			8.2							34	35	40		
21	12	1983		C7	800	6.7	6.4	6.0	29.6	29.2	29.0							7.9							43	40	13		
21	12	1983		C8	800	7.3	6.7	6.2	28.8	28.5	28.2							7.8							30	31	4		
21	12	1983		C9	800	6.5	5.9	5.8	28.7	28.2	28.1							7.6							40	40	9		
21	12	1983		D5	800	6.3	6.1	6.0	28.7	28.4	28.2							7.9							34	33	13		
21	12	1983		D6	800	6.2	5.8	5.7	28.8	28.3	28.1							7.5							34	35	58		
21	12	1983		D7	800	6.9	6.6	6.6	29.3	28.9	28.7							7.5							40	40	18		
24	12	1983		C1																					25	25			
24	12	1983		C2																					27	25			
24	12	1983		C3																					25	25			
24	12	1983		C4																					24	23			
24	12	1983		C5																					26	28			
24	12	1983		C6								33.9													27	26			
24	12	1983		C7																					32	31			
24	12	1983		C8																					27	26			
24	12	1983		C9																					23	23			
24	12	1983		D5																					23	23			
24	12	1983		D6																					24	24			
24	12	1983		D7																					30	30			
27	12	1983		C1	800	5.6	5.5	5.3	27.9	27.8	27.8					22	20	7.6							38	36	31		
27	12	1983		C2	800	5.2	5.1	4.8	27.7	27.7	27.6					23	22	7.3							34	34	22		
27	12	1983		C3	800	5.3	4.8	4.6	27.3	27.2	27.0					21	21	7.2							32	33	4		
27	12	1983		C4	800	5.9	5.7	5.4	27.6	27.6	27.5	32.2	28.9	26.7	26.7	21	20	7.3							34	35	80		

TABLE 3

Weekly and Twice Weekly Measurements. Bogor, Indonesia, Cycle I, Wet Season

DATE			EXTRA		D.O.	OXYGEN			POND TEMP.			MAX TEMP		MIN TEMP		ALKA	T.HARD		KJELDAHL	AMMONIA			TOTAL	TOTAL	ORTHO	S.DISK		CHLOROPHYLL		
DAY	MONTH	YEAR	DATA?	POND	SAMPLE TIME	TOP	MID	BOT	TOP	MID	BOT	TOP	BOT	TOP	BOT	mg/l CaCO3	mg/l CaCO3	pH	N mg/l	N mg/l	NO2-N mg/l	NO3-N mg/l	NO2&3-N mg/l	P mg/l	PO4-P mg/l	A cm	B cm	a mg/m3	b mg/m3	c mg/m3
XX	XX	XXXX	Y or N		XXXX	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XXX	XXX	XX.X	X.XX	X.XX	X.XX	X.XX	XX.XX	X.XX	X.XX	XX	XX	XXXX	XXXX	XXXX
27	12	1983		C5	800	6.2	5.9	5.7	27.6	27.6	27.5	33.9	28.3	26.7	26.7	20	20	7.3								36	36	36		
27	12	1983		C6	800	6.5	6.3	6.0	28.3	28.3	28.3	33.3	30.6	27.2	27.2	24	22	7.6								36	36	45		
27	12	1983		C7	800	5.3	5.5	5.3	27.9	27.9	27.8					21	21	7.3								40	40	31		
27	12	1983		C8	800	5.7	5.4	5.2	27.7	27.6	27.6					19	19	7.3								31	31	36		
27	12	1983		C9	800	5.7	5.5	5.4	27.3	27.3	27.1					20	19	7.3								35	36	67		
27	12	1983		D5	800	5.8	5.5	5.4	27.8	27.6	27.6					19	18	7.2								34	34	62		
27	12	1983		D6	800	5.1	4.7	4.5	27.7	27.5	27.4					20	19	7.2								35	35	13		
27	12	1983		D7	800	6.1	5.6	5.0	27.9	27.9	27.7					21	20	7.4								34	34	31		
31	12	1983		C1																						28	28			
31	12	1983		C2																						30	30			
31	12	1983		C3																						26	26			
31	12	1983		C4																						23	22			
31	12	1983		C5																						30	30			
31	12	1983		C6																						33	34			
31	12	1983		C7																						35	35			
31	12	1983		C8																						31	32			
31	12	1983		C9																						26	26			
31	12	1983		D5																						30	31			
31	12	1983		D6																						31	31			
31	12	1983		D7																						29	30			
2	1	1984		C1	800	7.4	7.0	6.3	27.6	27.2	26.9							8.3								30	30	22		
2	1	1984		C2	800	5.0	4.7	4.6	27.4	27.0	26.9							7.6								32	32	31		
2	1	1984		C3	800	5.9	5.3	5.1	26.7	26.3	26.1							7.5								28	27	58		
2	1	1984		C4	800	6.5	6.3	5.8	27.2	26.9	26.8	31.7	28.3	26.7	25.0			7.6								26	27	9		
2	1	1984		C5	800	7.3	6.6	6.5	27.3	27.1	26.9	31.7	27.8	26.7	26.1			8.1								27	27	13		
2	1	1984		C6	800	6.9	6.4	6.1	28.1	27.5	27.2	31.7	30.0	26.1	26.1			8.6								30	31	18		
2	1	1984		C7	800	7.0	6.6	6.6	27.7	27.0	26.9							8.2								40	37	<2.7		
2	1	1984		C8	800	6.3	5.9	5.8	27.5	26.9	26.7							7.6								26	26	<2.7		
2	1	1984		C9	800	6.8	5.7	5.3	27.4	26.9	26.7							7.5								36	36	36		
2	1	1984		D5	800	6.6	6.4	6.3	27.5	27.2	27.0							7.4								25	30	<2.7		
2	1	1984		D6	800	7.1	6.4	6.0	27.6	27.0	26.7							7.5								27	30	40		
2	1	1984		D7	800	6.5	6.0	5.2	27.7	27.0	26.7							7.5								25	25	<2.7		
7	1	1984		C1																						25	26			
7	1	1984		C2																						26	26			
7	1	1984		C3																						17	17			
7	1	1984		C4																						18	17			
7	1	1984		C5																						17	17			
7	1	1984		C6																						26	26			
7	1	1984		C7																						28	30			
7	1	1984		C8																						20	20			
7	1	1984		C9																						26	26			
7	1	1984		D5																						24	24			
7	1	1984		D6																						25	25			
7	1	1984		D7																						20	20			
10	1	1984		C1	800	5.3	5.5	5.3	25.7	25.6	25.5							7.5								16	17	<2.7		
10	1	1984		C2	800	5.6	5.4	5.2	26.2	26.0	25.8							7.3								20	20	18		
10	1	1984		C3	800	5.5	5.4	5.1	25.5	25.5	25.4							7.3								16	16	4		
10	1	1984		C4	800	6.3	5.8	5.5	26.2	26.0	25.9	31.7	28.3	26.1	25.0			7.5								25	25	<2.7		
10	1	1984		C5	800	6.3	5.6	5.2	26.3	26.2	25.9	31.7	27.8	26.1	25.6			7.5								19	20	22		

Weekly and Twice Weekly Measurements. Bogor, Indonesia, Cycle I, Wet Season

DATE			EXTRA		D.O.	OXYGEN			POND TEMP.			MAX TEMP		MIN TEMP		ALKA	T.HARD		KJELDAHL	AMMONIA			TOTAL	TOTAL	ORTHO	S.DISK		CHLOROPHYLL		
DAY	MONTH	YEAR	DATA?	POND	SAMPLE TIME	TOP	MID	BOT	TOP	MID	BOT	TOP	BOT	TOP	BOT	mg/l	mg/l	pH	N	N	NO2-N	NO3-N	NO2&3-N	P	PO4-P	A	B	a	b	c
XX	XX	XXXX	Y or N		XXXX	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	CaCO3 XXX	CaCO3 XXX	XX.X	X.XX	X.XX	X.XX	X.XX	XX.XX	X.XX	X.XX	cm XX	cm XX	mg/m3 XXXX	mg/m3 XXXX	mg/m3 XXXX
10	1	1984		C6	800	6.3	6.3	5.9	26.8	26.5	26.4	31.7	28.9	26.1	26.7			7.5								28	28	85		
10	1	1984		C7	800	8.4	7.9	7.2	26.8	26.6	26.5							7.1								33	33	<2.7		
10	1	1984		C8	800	6.7	5.8	5.5	26.7	26.3	26.2							7.6								25	24	<2.7		
10	1	1984		C9	800	6.2	5.7	5.5	26.6	26.3	26.1							7.5								22	21	<2.7		
10	1	1984		D5	800	7.1	6.7	7.3	27.0	26.6	26.3							7.7								26	26	9		
10	1	1984		D6	800	6.5	6.0	5.6	26.6	26.2	26.0							8.6								21	21	18		
10	1	1984		D7	800	10.3	8.8	7.9	26.9	26.6	26.5							8.6								21	23	53		
14	1	1984		C1																						20	20			
14	1	1984		C2																						20	20			
14	1	1984		C3																						19	19			
14	1	1984		C4																						21	21			
14	1	1984		C5																						21	21			
14	1	1984		C6																						27	30			
14	1	1984		C7																						26	27			
14	1	1984		C8																						24	24			
14	1	1984		C9																						21	22			
14	1	1984		D5																						20	21			
14	1	1984		D6																						19	18			
14	1	1984		D7																						22	22			
17	1	1984		C1	800	5.8	5.6	5.4	25.7	25.5	25.4							7.9								24	25	67		
17	1	1984		C2	800	5.5	5.3	5.1	26.1	26.2	25.9							7.6								27	27	30		
17	1	1984		C3	800	5.6	5.2	5.1	26.1	26.0	25.9							7.6								25	26	31		
17	1	1984		C4	800	5.9	5.8	5.6	26.2	26.0	25.9	31.1	28.3	26.6	26.1			7.6								29	29	27		
17	1	1984		C5	800	7.2	6.7	6.0	27.0	26.8	26.5	31.1	28.3	26.6	26.7			7.7								34	33	9		
17	1	1984		C6	800	7.2	6.7	6.5	27.9	27.6	27.4	31.1	30.0	27.2	27.2			8.2								39	39	18		
17	1	1984		C7	800	7.9	7.6	7.1	27.5	27.4	27.3							8.2								40	40	36		
17	1	1984		C8	800	6.7	6.2	6.0	27.0	26.7	26.4							8.0								32	32	9		
17	1	1984		C9	800	6.5	5.8	5.7	26.8	26.3	26.1							7.8								30	30	49		
17	1	1984		D5	800	7.2	6.2	6.1	27.2	26.8	26.5							7.8								30	30	9		
17	1	1984		D6	800	6.0	5.8	5.4	26.5	26.2	26.1							7.7								26	26	40		
17	1	1984		D7	800	5.8	5.2	5.0	27.3	27.0	26.9							7.8								24	25	36		
20	1	1984		C1																						20	21			
20	1	1984		C2																						25	25			
20	1	1984		C3																						26	25			
20	1	1984		C4																						25	24			
20	1	1984		C5																						31	32			
20	1	1984		C6																						35	35			
20	1	1984		C7																						40	40			
20	1	1984		C8																						31	32			
20	1	1984		C9																						29	29			
20	1	1984		D5																						34	32			
20	1	1984		D6																						26	27			
20	1	1984		D7																						26	26			
25	1	1984		C1	900	6.2	6.0	5.8	27.1	27.1	27.1					21	21	7.3								29	29	120		
25	1	1984		C2	900	5.6	5.5	5.5	26.9	26.7	26.7					21	20	7.3								27	28	27		
25	1	1984		C3	900	5.5	5.5	5.4	27.1	27.0	26.9					21	21	7.4								24	24	49		
25	1	1984		C4	900	6.6	6.6	6.5	27.5	27.2	27.0	31.7	28.9	25.6	25.6	20	19	7.3								33	34	<2.7		
25	1	1984		C5	900	6.1	6.1	6.0	26.8	26.5	26.4	32.2	32.2	23.3	26.7	21	20	7.3								29	30	<2.7		
25	1	1984		C6	900	6.1	6.0	5.7	28.1	28.1	28.0	32.2	30.0	27.8	27.8	23	22	6.9								36	36	<2.7		

TABLE 3

Weekly and Twice Weekly Measurements. Bogor, Indonesia, Cycle I, Wet Season

DATE			EXTRA		D.O.	OXYGEN			POND TEMP.			MAX TEMP		MIN TEMP		ALKA	T.HARD		KJELDAHL	AMMONIA				TOTAL	TOTAL	ORTHO	S.DISK		CHLOROPHYLL		
DAY	MONTH	YEAR	DATA?	POND	SAMPLE TIME	TOP	MID	BOT	TOP	MID	BOT	TOP	BOT	TOP	BOT				N	N	NO2-N	NO3-N	NO2&3-N	P	PO4-P	A	B	a	b	c
XX	XX	XXXX	Y or N		XXXX	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XXX	XXX	XX.X	X.XX	X.XX	X.XX	X.XX	XX.XX	X.XX	X.XX	XX	XX	XXXX	XXXX	XXXX
25	1	1984		C7	900	7.0	6.7	6.6	28.2	28.0	27.8					20	19	6.7								39	39	9		
25	1	1984		C8	900	6.5	6.3	6.3	27.8	27.8	27.7					18	18	7.1								36	37	22		
25	1	1984		C9	900	6.4	6.0	5.9	27.5	27.3	27.2					21	19	7.2								34	33	9		
25	1	1984		D5	900	6.1	6.2	6.1	27.2	27.2	27.2					18	17	7.3								34	35	22		
25	1	1984		D6	900	6.8	6.1	5.9	27.3	27.1	26.8					20	19	7.2								32	32	67		
25	1	1984		D7	900	6.0	5.6	5.4	27.8	27.5	27.3					20	18	7.2								26	26	31		
28	1	1984		C1																						30	30			
28	1	1984		C2																						27	28			
28	1	1984		C3																						21	31			
28	1	1984		C4																						24	25			
28	1	1984		C5																						23	23			
28	1	1984		C6																						30	30			
28	1	1984		C7																						27	26			
28	1	1984		C8																						30	30			
28	1	1984		C9																						26	27			
28	1	1984		D5																						27	27			
28	1	1984		D6																						24	23			
28	1	1984		D7																						26	26			
31	1	1984		C1	800	8.3	8.2	8.0	27.1	27.1	27.1							8.2								27	28	49		
31	1	1984		C2	800	7.7	7.4	7.3	26.9	26.8	26.6							7.6								30	30	85		
31	1	1984		C3	800	6.4	6.3	6.2	25.7	25.6	25.6							7.1								22	22	49		
31	1	1984		C4	800	6.1	6.0	5.9	26.3	26.2	26.1	32.2	29.4	25.0	25.0			7.2								25	25	62		
31	1	1984		C5	800	7.2	6.8	6.3	26.9	26.8	26.7		29.4		26.1			7.2								25	25	62		
31	1	1984		C6	800	7.8	7.6	7.2	27.6	27.6	27.4	32.2	29.4	26.1	6.7			8.5								28	26	18		
31	1	1984		C7	800	9.4	9.1	8.4	27.4	27.4	27.4							8.9								30	30	18		
31	1	1984		C8	800	8.2	7.6	7.4	27.3	27.1	26.9							8.1								27	29	31		
31	1	1984		C9	800	8.2	7.6	7.3	27.0	26.9	26.7							8.1								30	30	45		
31	1	1984		D5	800	7.6	6.9	6.9	27.3	27.0	27.0							7.5								25	25	27		
31	1	1984		D6	800	7.6	7.0	6.6	26.8	26.5	26.4							7.5								27	25	96		
31	1	1984		D7	800	7.7	7.2	6.8	27.3	27.2	27.1							7.8								28	30	23		
2	2	1984		C1																						27	27			
2	2	1984		C2																						27	28			
2	2	1984		C3																						24	22			
2	2	1984		C4																						30	31			
2	2	1984		C5																						29	29			
2	2	1984		C6																						27	28			
2	2	1984		C7																						31	31			
2	2	1984		C8																						27	27			
2	2	1984		C9																						33	34			
2	2	1984		D5																						21	22			
2	2	1984		D6																						30	30			
2	2	1984		D7																						31	31			
7	2	1984		C1	800	9.7	9.1	8.4	27.9	27.6	27.4							7.4								27	26	31		
7	2	1984		C2	800	8.7	8.3	8.3	28.2	27.5	27.2							7.3								25	26	18		
7	2	1984		C3	800	8.6	7.5	7.1	27.0	26.7	26.5							7.3								25	24	22		
7	2	1984		C4	800	8.5	8.1	7.6	27.1	26.5	26.2	31.1	28.9	23.3	25.5			7.2								19	15	40		
7	2	1984		C5	800	8.8	8.1	7.7	27.7	27.4	27.0	33.3	28.3	26.1	26.1			7.3								26	26	49		
7	2	1984		C6	800	10.4	9.9	9.1	28.4	27.6	27.4	31.1	8.3	26.7	26.7			8.5								26	25	76		
7	2	1984		C7	800	8.8	8.6	7.9	28.3	27.9	27.2							8.0								26	27	22		

Weekly and Twice Weekly Measurements. Bogor, Indonesia, Cycle I, Wet Season

DATE			EXTRA		D.O.	OXYGEN			POND TEMP.			MAX TEMP		MIN TEMP		ALKA	T.HARD		KJELDAHL	AMMONIA				TOTAL	TOTAL	ORTHO	S.DISK		CHLOROPHYLL		
DAY	MONTH	YEAR	DATA?	POND	SAMPLE	TOP	MID	BOT	TOP	MID	BOT	TOP	BOT	TOP	BOT	mg/l	mg/l	pH	N	N	NO2-N	NO3-N	NO2&3-N	P	PO4-P	A	B	a	b	c
XX	XX	XXXX	Y or N		XXXX	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	CaCO3 XXX	CaCO3 XXX	XX.X	X.XX	mg/l X.XX	mg/l X.XX	mg/l X.XX	mg/l X.XX	mg/l XX.XX	mg/l X.XX	mg/l X.XX	cm XX	cm XX	mg/m3 XXXX	mg/m3 XXXX	mg/m3 XXXX
7	2	1984		C8	800	8.5	8.2	8.2	28.3	27.5	27.4							7.8								30	30	27		
7	2	1984		C9	800	7.3	6.9	6.4	27.8	27.5	27.1							7.4								27	28	9		
7	2	1984		D5	800	7.3	7.2	6.9	28.1	27.5	27.3							7.1								21	20	53		
7	2	1984		D6	800	8.5	8.0	7.5	27.8	27.4	26.9							7.2								26	26	18		
7	2	1984		D7	800	7.2	6.9	6.4	28.7	27.7	27.3							7.4								30	30	62		
11	2	1984		C1																						28	28			
11	2	1984		C2																						27	27			
11	2	1984		C3																						21	21			
11	2	1984		C4																						37	34			
11	2	1984		C5																						26	25			
11	2	1984		C6																						31	27			
11	2	1984		C7																						26	29			
11	2	1984		C8																						23	24			
11	2	1984		C9																						24	24			
11	2	1984		D5																						27	26			
11	2	1984		D6																						27	26			
11	2	1984		D7																						30	30			
13	2	1984		C1	800	6.5	6.0	6.0	26.9	26.8	26.7							6.5								25	25	53		
13	2	1984		C2	800	5.4	5.4	5.1	26.2	26.1	26.1							7.2								27	26	40		
13	2	1984		C3	800	5.7	5.4	5.3	26.1	25.9	25.8							7.3								19	19	53		
13	2	1984		C4	800	6.4	6.3	5.8	27.0	26.8	26.7	30.6	28.9	26.7	26.1			7.7								40	39	22		
13	2	1984		C5	800	5.9	5.7	5.5	26.9	26.6	26.5	30.6	28.3	26.7	26.7			7.8								30	32	40		
13	2	1984		C6	800	5.1	4.9	4.7	27.3	27.2	27.1	30.6	28.9	26.7	27.2			7.9								35	34	36		
13	2	1984		C7	800	6.4	6.1	5.9	27.3	27.2	27.1							8.1								30	27	45		
13	2	1984		C8	800	5.7	5.2	5.0	26.8	26.5	26.3							7.9								27	29	27		
13	2	1984		C9	800	5.0	4.7	4.6	27.0	26.8	26.6							8.0								29	29	22		
13	2	1984		D5	800	5.5	5.2	5.1	27.0	26.9	26.7							8.1								24	22	36		
13	2	1984		D6	800	4.9	4.8	4.6	26.5	26.0	25.9							8.0								16	16	29		
13	2	1984		D7	800	4.9	4.6	4.6	27.5	27.1	26.9							8.1								30	30	27		
18	2	1984		C1																						27	25			
18	2	1984		C2																						30	30			
18	2	1984		C3																						28	28			
18	2	1984		C4																						35	35			
18	2	1984		C5																						32	28			
18	2	1984		C6																						37	37			
18	2	1984		C7																						35	33			
18	2	1984		C8																						23	25			
18	2	1984		C9																						27	27			
18	2	1984		D5																						25	25			
18	2	1984		D6																						24	25			
18	2	1984		D7																						35	35			
21	2	1984		C1																						17	18	93		
21	2	1984		C2																						25	24	102		
21	2	1984		C3																						18	18	9		
21	2	1984		C4								30.6	28.9	20.0	19.4											36	34	36		
21	2	1984		C5								30.6	28.3	20.0	20.0											24	24	94		
21	2	1984		C6								30.6	29.4	20.0	20.6											30	30	9		
21	2	1984		C7																						30	31	45		
21	2	1984		C8																						29	29	13		

Weekly and Twice Weekly Measurements. Bogor, Indonesia, Cycle I, Wet Season

DATE			EXTRA DATA?	POND	D.O.	OXYGEN			POND TEMP.			MAX TEMP		MIN TEMP		ALKA	T.HARD		KJELDAHL	AMMONIA			TOTAL	TOTAL	ORTHO	S.DISK		CHLOROPHYLL		
DAY	MONTH	YEAR			SAMPLE TIME	TOP	MID	BOT	TOP	MID	BOT	TOP	BOT	TOP	BOT	mg/l CaCO3	mg/l CaCO3	pH	N mg/l	N mg/l	NO2-N mg/l	NO3-N mg/l	NO2&3-N mg/l	P mg/l	PO4-P mg/l	A cm	B cm	a mg/m3	b mg/m3	c mg/m3
XX	XX	XXXX	Y or N		XXXX	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XXX	XXX	XX.X	X.XX	X.XX	X.XX	X.XX	XX.XX	X.XX	X.XX	XX	XX	XXXX	XXXX	XXXX
21	2	1984		C9																						29	29	9		
21	2	1984		D5																						26	27	27		
21	2	1984		D6																						26	26	27		
21	2	1984		D7																						36	35	22		
23	2	1984		C1	730	5.6	5.4	4.9	25.6	26.0	26.0					21	19	5.7												
23	2	1984		C2	730	5.4	5.4	2.1	25.9	26.0	26.0					21	20	5.8												
23	2	1984		C3	730	4.1	3.6	2.1	25.4	25.4	25.3					21	21	5.8												
23	2	1984		C4	730	5.8	6.0	4.0	26.1	26.1	26.1					19	18	5.9												
23	2	1984		C5	730	5.3	5.4	5.4	25.9	25.9	25.9					20	18	5.9												
23	2	1984		C6	730	5.8	5.7	5.2	26.5	26.7	26.7					23	20	6.3												
23	2	1984		C7	730	6.0	5.7	5.6	26.3	26.3	26.3					20	20	6.4												
23	2	1984		C8	730	7.0	6.8	6.4	26.0	26.0	26.0					19	18	6.4												
23	2	1984		C9	730	5.3	5.1	5.0	25.9	26.0	26.0					19	20	6.3												
23	2	1984		D5	730	4.5	4.7	4.1	25.8	25.6	25.5					19	20	6.1												
23	2	1984		D6	730	4.0	4.0	3.4	25.1	25.0	25.0					20	19	6.2												
23	2	1984		D7	730	4.8	4.4	4.2	26.1	26.1	26.1					18	17	6.2												
24	2	1984		C1																						20	21			
24	2	1984		C2																						24	24			
24	2	1984		C3																						17	17			
24	2	1984		C4																						35	35			
24	2	1984		C5																						20	20			
24	2	1984		C6																						28	29			
24	2	1984		C7																						19	20			
24	2	1984		C8																						30	31			
24	2	1984		C9																						30	30			
24	2	1984		D5																						30	30			
24	2	1984		D6																						30	30			
24	2	1984		D7																						30	30			
27	2	1984		C1	800	6.2	5.8	5.2	27.0	27.0	26.8							7.6								20	20	27		
27	2	1984		C2	800	5.1	5.0	4.6	26.2	26.0	25.9							7.2								21	20	71		
27	2	1984		C3	800	5.8	5.6	5.6	25.9	25.8	25.6							7.2								25	25	22		
27	2	1984		C4	800	6.6	5.9	5.1	26.8	26.4	26.2	32.2	30.0	24.4	25.6			7.2								31	31	40		
27	2	1984		C5	800	6.1	5.7	5.5	26.4	26.0	26.0	31.7	28.9	26.1	26.7			7.3								25	26	31		
27	2	1984		C6	800	6.3	6.1	5.4	27.2	27.1	27.0	32.2	0.0	24.4	24.4			7.7								34	33	22		
27	2	1984		C7	800	6.4	5.4	5.2	27.0	26.9	26.8							7.5								30	31	45		
27	2	1984		C8	800	6.5	6.2	5.8	26.0	25.8	25.5							7.6								20	20	36		
27	2	1984		C9	800	6.4	5.6	5.5	26.2	26.2	26.0							7.5								23	23	80		
27	2	1984		D5	800	5.5	5.3	4.9	26.0	28.5	25.5							7.2								20	20	62		
27	2	1984		D6	800	6.3	5.8	4.7	26.3	26.1	26.0							7.3								26	26	62		
27	2	1984		D7	800	6.1	5.8	5.4	26.9	26.8	26.8							7.5								34	33	40		
1	3	1984		C1																						23	21			
1	3	1984		C2																						23	21			
1	3	1984		C3																						23	23			
1	3	1984		C4																						29	29			
1	3	1984		C5																						28	28			
1	3	1984		C6																						32	32			
1	3	1984		C7																						32	32			
1	3	1984		C8																						24	24			
1	3	1984		C9																						21	21			

Weekly and Twice Weekly Measurements. Bogor, Indonesia, Cycle I, Wet Season

DATE			EXTRA		D.O.	OXYGEN			POND TEMP.			MAX TEMP		MIN TEMP		ALKA	T.HARD		KJELDAHL	AMMONIA				TOTAL	TOTAL	ORTHO	S.DISK		CHLOROPHYLL		
DAY	MONTH	YEAR	DATA?	POND	SAMPLE TIME	TOP	MID	BOT	TOP	MID	BOT	TOP	BOT	TOP	BOT				N	N	NO2-N	NO3-N		NO2&3-N	P	PO4-P	A	B	a	b	c
						mg/l	mg/l	mg/l	deg C	deg C	deg C	deg C	deg C	deg C	deg C	mg/l	mg/l	pH	mg/l	mg/l	mg/l	mg/l		mg/l	mg/l	mg/l	cm	cm	mg/m3	mg/m3	mg/m3
XX	XX	XXXX	Y or N		XXXX	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XXX	XXX	XX.X	X.XX	X.XX	X.XX	X.XX		XX.XX	X.XX	X.XX	XX	XX	XXXX	XXXX	XXXX
1	3	1984		D5																						23	24			
1	3	1984		D6																						25	25			
1	3	1984		D7																						31	31			
6	3	1984		C1																						20	19			
6	3	1984		C2																						24	24			
6	3	1984		C3																						20	20			
6	3	1984		C4																						30	30			
6	3	1984		C5																						28	27			
6	3	1984		C6																						28	27			
6	3	1984		C7																						29	29			
6	3	1984		C8																						24	24			
6	3	1984		C9																						20	20			
6	3	1984		D5																						29	29			
6	3	1984		D6																						20	19			
6	3	1984		D7																						30	29			
8	3	1984		C1	800	5.8	5.4	4.5	26.7	26.0	25.8							7.6								22	20	89		
8	3	1984		C2	800	5.4	4.6	3.8	24.5	23.0	22.1							6.5								21	20	85		
8	3	1984		C3	800	5.3	5.0	3.8	25.0	23.9	23.0							7.3								21	21	67		
8	3	1984		C4	800	6.2	5.8	5.2	26.0	25.6	25.0	30.0	27.8	25.6	22.2			7.4								29	28	13		
8	3	1984		C5	800	6.2	5.8	5.6	26.0	24.0	23.0	30.0	28.3	26.1	25.6			7.1								28	29	62		
8	3	1984		C6	800	7.2	6.4	6.2	28.7	27.5	27.0	32.8	32.2	26.1	26.7			7.5								29	29	36		
8	3	1984		C7	800	7.4	6.8	6.0	28.9	28.0	27.5							7.5								30	30	49		
8	3	1984		C8	800	6.4	5.4	4.8	27.0	26.9	26.5							7.1								26	25	45		
8	3	1984		C9	800	5.0	3.8	3.7	25.6	24.9	24.6							6.8								20	20	13		
8	3	1984		D5	800	5.9	5.4	4.8	24.5	22.5	22.3							6.8								29	29	45		
8	3	1984		D6	800	4.3	4.0	5.4	27.0	26.8	26.0							6.5								20	20	45		
8	3	1984		D7	800	5.6	5.4	4.8	25.9	25.4	25.3							6.8								29	29	49		
12	3	1984		C1	800	5.6	4.2	4.1	27.3	26.8	26.5							7.2								20	20	116		
12	3	1984		C2	800	4.9	4.8	3.8	26.0	27.0	26.5							7.2								24	24	49		
12	3	1984		C3	800	5.8	4.3	4.0	28.0	26.0	25.8							7.2								21	19	89		
12	3	1984		C4	800	6.1	5.0	4.7	28.0	27.2	26.8	31.1	28.3	25.6	26.7			7.6								25	25	58		
12	3	1984		C5	800	5.6	4.5	3.8	27.5	26.8	26.3	28.9	27.8	26.1	26.1			7.3								19	20	32		
12	3	1984		C6	800	6.1	5.0	5.6	27.5	27.2	27.0	31.1	30.0	27.2	26.7			8.5								30	30	40		
12	3	1984		C7	800	5.6	5.9	4.2	28.0	27.4	26.5							8.5								31	31	27		
12	3	1984		C8	800	4.2	3.7	3.3	26.5	26.8	26.5							7.5								22	20	58		
12	3	1984		C9	800	4.8	4.3	4.1	28.5	27.0	26.5							7.5								25	25	32		
12	3	1984		D5	800	6.0	4.4	3.8	28.0	26.5	26.2							7.4								25	24	22		
12	3	1984		D6	800	4.9	3.8	3.0	27.0	26.0	25.5							7.3								20	19	36		
12	3	1984		D7	800	5.3	4.6	4.3	27.5	27.0	26.5							7.5								25	25	13		
15	3	1984		C1																						22	22			
15	3	1984		C2																						28	28			
15	3	1984		C3																						24	25			
15	3	1984		C4																						28	27			
15	3	1984		C5																						26	26			
15	3	1984		C6																						37	37			
15	3	1984		C7																						37	37			
15	3	1984		C8																						30	30			
15	3	1984		C9																						30	31			
15	3	1984		D5																						28	27			

TABLE 3

Weekly and Twice Weekly Measurements. Bogor, Indonesia, Cycle I, Wet Season

DATE			EXTRA		D.O.	OXYGEN			POND TEMP.			MAX TEMP		MIN TEMP		ALKA	T.HARD		KJELDAHL	AMMONIA			TOTAL	TOTAL	ORTHO	S.DISK		CHLOROPHYLL		
			DATA?	POND	SAMPLE	TOP	MID	BOT	TOP	MID	BOT	TOP	BOT	TOP	BOT				N	N	NO2-N	NO3-N	NO2&3-N	P	PO4-P	A	B	a	b	c
DAY	MONTH	YEAR			TIME	mg/l	mg/l	mg/l	deg C	deg C	deg C	deg C	deg C	deg C	deg C	CaCO3	CaCO3	pH	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	cm	cm	mg/m3	mg/m3	mg/m3
XX	XX	XXXX	Y or N		XXXX	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XXX	XXX	XX.X	X.XX	X.XX	X.XX	X.XX	XX.XX	X.XX	X.XX	XX	XX	XXXX	XXXX	XXXX
15	3	1984		D6																					30	30			
15	3	1984		D7																					32	32			
20	3	1984		C1		4.2	3.8	3.3	27.8	27.4	27.2					25	25	7.3							15	15	76		
20	3	1984		C2		4.8	4.7	4.0	27.0	26.8	26.2					22	21	7.3							26	27	40		
20	3	1984		C3		5.3	4.1	3.8	27.4	27.0	26.5					22	24	7.4							25	25	31		
20	3	1984		C4		5.2	4.3	4.2	28.5	28.2	28.0	33.9	30.6	27.2	26.1	18	17	7.6							31	31	27		
20	3	1984		C5		5.4	4.8	4.3	28.2	27.8	27.0	32.2	30.6	27.8	27.8	18	17	7.5							26	26	80		
20	3	1984		C6		6.1	5.2	5.1	28.8	28.2	28.2	31.7	31.7	26.7	27.2	23	20	7.9							31	30	58		
20	3	1984		C7		4.3	3.8	4.1	29.0	28.6	28.2					21	18	7.7							36	37	27		
20	3	1984		C8		6.3	6.2	5.4	28.8	28.6	28.2					19	16	7.8							30	30	107		
20	3	1984		C9		4.9	4.3	4.0	28.2	27.8	27.2					20	18	7.6							25	25	9		
20	3	1984		D5		5.8	5.4	4.8	28.2	27.8	27.1					19	16	7.5							17	17	27		
20	3	1984		D6		4.8	4.7	3.6	27.5	27.0	26.8					20	18	7.5							27	28	18		
20	3	1984		D7		6.0	5.4	4.9	28.3	28.0	28.0					16	15	7.7							31	31	31		

Weekly and Twice Weekly Measurements. Bogor, Indonesia, Cycle I, Dry Season

DATE			EXTRA		D.O.	OXYGEN			POND TEMP.			MAX TEMP		MIN TEMP		ALKA	T.HARD		KJELDAHL	AMMONIA			TOTAL	TOTAL	ORTHO	S.DISK		CHLOROPHYLL		
DAY	MONTH	YEAR	DATA?	POND	SAMPLE TIME	TOP	MID	BOT	TOP	MID	BOT	TOP	BOT	TOP	BOT			pH	N	N	NO2-N	NO3-N	NO2&3-N	P	PO4-P	A	B	a	b	c
XX	XX	XXXX	Y or N		(HR)	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XXX	XXX	XX.X	X.XX	X.XX	X.XX	X.XX	XX.XX	X.XX	X.XX	XX	XX	XXXX	YYYY	XXXX
11	6	1984		C2	800	5.0	4.6	4.7	27.2	27.0	26.9					21	20	7.8	2.46				0.15	0.17	0.05	25	25	3		
11	6	1984		C3	800	5.2	5.1	5.1	27.5	27.4	27.3					32	28	7.5	0.88				0.18	0.29	0.08	25	25	21		
11	6	1984		C4	800	5.7	5.4	5.2	27.1	26.6	26.5					27	19	7.3	1.46				0.83	0.16	0.03	30	30	40		
11	6	1984		C5	800	6.2	5.8	5.6	27.3	26.8	26.5					22	19	8.0	0.24				0.14	0.15	0.04	23	22	13		
11	6	1984		C6	800	5.9	5.6	5.1	27.2	27.1	26.4					32	28	8.2	1.40				1.28	0.18	0.07	25	25	21		
11	6	1984		C7	800	7.3	7.0	6.3	27.2	27.0	26.8					26	23	8.2	2.80				0.12	0.15	0.05	32	32	<2.7		
11	6	1984		C8	800	6.4	6.2	6.1	27.1	26.9	26.9					21	18	8.1	1.90				1.02	0.15	0.07	30	30	<2.7		
11	6	1984		C9	800	7.4	7.4	7.4	28.3	28.3	28.3					60	60	9.8	1.22				0.05	0.19	0.08	75	75	<2.7		
11	6	1984		D5	800	7.0	6.9	6.9	28.3	28.3	28.3					56	55	9.8	0.00				0.02	0.08	0.04	100	100	5		
11	6	1984		D6	800	5.5	5.4	5.5	27.2	27.7	27.6					53	50	9.5	0.00				<0.01	0.13	0.07	50	53	3		
11	6	1984		D7	800	5.9	6.1	6.1	27.5	27.4	27.3					50	48	9.5	1.90				0.02	0.13	0.08	50	51	32		
17	6	1984		C2																						30	30			
17	6	1984		C3																						30	30			
17	6	1984		C4																						30	30			
17	6	1984		C5																						25	24			
17	6	1984		C6																						23	23			
17	6	1984		C7																						33	30			
17	6	1984		C8																						30	30			
17	6	1984		C9																						70	70			
17	6	1984		D5																						95	95			
17	6	1984		D6																						45	48			
17	6	1984		D7																						50	50			
19	6	1984		C2	800	8.5	6.5	5.8	29.8	28.0	27.3							7.5								30	32	19		
19	6	1984		C3	800	11.7	8.6	8.0	29.8	28.4	27.9							8.8								30	30	29		
19	6	1984		C4	800	11.3	9.2	7.0	29.1	28.1	27.6	34.4	28.9	23.3	25.0			8.3								30	30	35		
19	6	1984		C5	800	11.5	9.3	7.9	29.6	28.0	27.3	33.9	28.3	22.8	25.6			8.5								25	24	69		
19	6	1984		C6	800	10.7	7.7	6.6	29.0	28.0	27.4	31.7	30.0	25.0	26.7			8.7								25	25	45		
19	6	1984		C7	800	10.2	6.7	5.3	28.5	27.6	27.1							8.0								30	30	<2.7		
19	6	1984		C8	800	5.7	5.2	4.6	30.1	27.9	27.0							7.6								30	31	3		
19	6	1984		C9	800	8.8	8.7	6.9	30.1	29.4	29.2							9.4								76	75	<2.7		
19	6	1984		D5	800	9.8	9.2	8.8	30.9	30.7	30.5							9.6								90	90	3		
19	6	1984		D6	800	8.0	7.9	7.7	30.1	29.6	29.1							9.1								50	50	11		
19	6	1984		D7	800	9.4	9.3	7.9	29.9	29.4	28.7							9.1								50	50	27		
22	6	1984		C2																						31	32			
22	6	1984		C3																						28	29			
22	6	1984		C4																						25	27			
22	6	1984		C5																						23	23			
22	6	1984		C6																						28	27			
22	6	1984		C7																						32	32			
22	6	1984		C8																						29	30			
22	6	1984		C9																						71	72			
22	6	1984		D5																						92	91			
22	6	1984		D6																						51	54			
22	6	1984		D7																						53	53			
27	6	1984		C2	800	4.5	4.2	4.2	27.2	27.1	27.1							7.3								15	17	43		
27	6	1984		C3	800	4.8	4.4	4.2	27.6	27.4	27.3							7.5								18	18	5		
27	6	1984		C4	800	8.0	7.0	7.6	27.3	27.2	27.2	32.2	31.1	26.7	25.6			8.2								20	20	43		
27	6	1984		C5	800	5.3	4.8	4.5	27.4	27.2	29.1	30.5	30.0	26.7	25.6			7.3								18	20	43		
27	6	1984		C6	800	4.7	4.5	4.0	27.1	27.0	26.8	32.2	28.9	26.7	26.7			7.8								17	16	<2.7		

Weekly and Twice Weekly Measurements. Bogor, Indonesia, Cycle I, Dry Season

DATE			EXTRA		D.O.	OXYGEN			POND TEMP.			MAX TEMP		MIN TEMP		ALKA	T.HARD		KJELDAHL	AMMONIA			TOTAL	TOTAL	ORTHO	S.DISK		CHLOROPHYLL		
DAY	MONTH	YEAR	DATA?	POND	SAMPLE TIME	TOP	MID	BOT	TOP	MID	BOT	TOP	BOT	TOP	BOT	mg/l	mg/l	pH	N	N	NO2-N	NO3-N	NO23-N	P	PO4-P	A	B	a	b	c
XX	XX	XXXX	Y or N		XXXX	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	CaCO3	CaCO3	XX.X	X.XX	X.XX	X.XX	X.XX	XX.XX	X.XX	X.XX	XX	XX	XXXX	XXXX	XXXX
27	6	1984		C7	830	5.7	5.5	5.4	27.5	27.1	26.9							8.0								20	22	75		
27	6	1984		C8	830	8.2	7.8	7.0	26.9	26.7	26.5							7.9								22	22	51		
27	6	1984		C9	830	8.1	8.8	8.0	28.1	28.0	27.9							9.3								36	37	11		
27	6	1984		D5	830	7.1	7.1	7.0	28.4	28.3	28.2							9.3								35	37	19		
27	6	1984		D6	830	7.4	7.4	7.4	28.0	27.9	27.8							9.2								35	35	16		
27	6	1984		D7	830	7.5	7.4	7.4	28.1	28.0	28.0							9.4								40	40	5		
29	6	1984		C2																						15	15			
29	6	1984		C3																						20	20			
29	6	1984		C4																						20	20			
29	6	1984		C5																						23	23			
29	6	1984		C6																						15	15			
29	6	1984		C7																						20	20			
29	6	1984		C8																						25	25			
29	6	1984		C9																						35	35			
29	6	1984		D5																						37	37			
29	6	1984		D6																						33	33			
29	6	1984		D7																						36	37			
9	7	1984		C2																						22	23	<2.7		
9	7	1984		C3																						22	22	48		
9	7	1984		C4								30.6	31.1	20.0	24.4											35	35	5		
9	7	1984		C5								30.6	30.0	21.7	24.4											23	24	13		
9	7	1984		C6								30.6	30.0	26.1	26.1											27	28	56		
9	7	1984		C7																						30	30	16		
9	7	1984		C8																						30	30	45		
9	7	1984		C9																						25	25	27		
9	7	1984		D5																						20	21	24		
9	7	1984		D6																						25	27	67		
9	7	1984		D7																						28	28	27		
11	7	1984		C2	830	5.3	5.1	5.0	27.8	27.8	28.0					17	13	7.5	0.66	0.17	0.06	<0.01	0.06	0.27	0.09	25	25			
11	7	1984		C3	830	4.8	4.6	4.2	28.1	28.1	28.1					30	27	7.4	0.54	0.30	0.07	0.09	0.17	0.27	0.14	20	20			
11	7	1984		C4	830	6.7	6.3	6.0	28.1	28.1	28.0					20	18	7.5	0.90	0.16	0.04	0.15	0.19	0.20	0.03	33	33			
11	7	1984		C5	830	6.7	6.4	6.1	28.0	28.0	28.0					20	16	7.5	0.58	0.28	0.04	0.27	0.51	0.27	0.08	25	25			
11	7	1984		C6	830	8.3	7.8	7.4	28.2	28.2	28.2					25	21	8.6	0.78	0.18	0.03	0.30	0.33	0.23	0.10	30	32			
11	7	1984		C7	830	7.1	6.8	6.6	28.3	28.2	28.2					22	19	8.1	0.78	0.21	0.04	0.39	0.43	0.25	0.10	30	30			
11	7	1984		C8	830	6.2	5.9	5.7	28.3	28.3	28.3					18	16	7.7	0.72	0.25	0.05	0.52	0.57	0.20	0.08	28	30			
11	7	1984		C9	830	11.3	11.3	11.2	28.0	28.0	28.0					31	29	9.5	1.00	0.27	0.04		<0.01	0.28	0.13	27	28			
11	7	1984		D5	830	6.5	6.4	6.2	28.0	28.0	28.0					40	36	9.2	0.46	0.17	0.01	0.01	0.02	0.39	0.28	20	20			
11	7	1984		D6	830	13.0	12.7	12.5	28.4	28.4	28.3					33	30	9.6	1.00	0.18	0.01		<0.01	0.38	0.21	25	25			
11	7	1984		D7	830	10.7	10.6	10.5	28.3	28.3	28.4					37	34	9.6	1.40	0.14	0.01		<0.01	0.45	0.22	30	30			
16	7	1984		C2	800	4.2	4.1	3.8	27.0	27.0	26.9							7.1								27	28	<2.7		
16	7	1984		C3	800	4.1	4.0	3.9	27.0	26.9	26.8							7.2								23	24	24		
16	7	1984		C4	800	5.2	5.1	5.0	27.0	26.9	26.8	30.6	31.1	25.0	25.6			7.3								31	31	29		
16	7	1984		C5	800	4.6	4.2	3.9	26.7	26.6	26.6	33.9	29.4	26.7	26.1			7.2								25	25	<2.7		
16	7	1984		C6	800	4.4	9.1	4.0	27.2	27.1	27.1	33.3	30.6	27.8	16.7			7.4								30	30	61		
16	7	1984		C7	800	3.8	3.7	3.7	27.2	27.1	27.0							7.3								30	31	13		
16	7	1984		C8	800	5.4	5.1	4.9	27.1	27.0	26.9							7.3								35	34	8		
16	7	1984		C9	800	9.1	8.7	8.7	27.2	27.1	27.0							9.4								30	30	27		
16	7	1984		D5	800	6.5	6.3	6.2	27.2	27.2	27.1							9.1								29	29	24		
16	7	1984		D6	800	6.4	6.1	6.1	26.8	26.7	26.6							9.1								30	30	<2.7		

Weekly and Twice Weekly Measurements. Bogor, Indonesia, Cycle I, Dry Season

DATE			EXTRA		D.O.	OXYGEN			POND TEMP.			MAX TEMP		MIN TEMP		ALKA	T.HARD		KJELDAHL	AMMONIA			TOTAL	TOTAL	ORTHO	S.DISK		CHLOROPHYLL		
DAY	MONTH	YEAR	DATA?	POND	SAMPLE TIME	TOP	MID	BOT	TOP	MID	BOT	TOP	BOT	TOP	BOT	mg/l	mg/l	pH	N	N	NO2-N	NO3-N	NO2&3-N	P	PO4-P	A	B	a	b	c
						mg/l	mg/l	mg/l	deg C	deg C	deg C	deg C	deg C	deg C	deg C	CaCO3	CaCO3		mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	cm	cm	mg/m3	mg/m3	mg/m3
XX	XX	XXXX	Y or N		XXXX	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XXX	XXX	XX.X	X.XX	X.XX	X.XX	X.XX	XX.XX	X.XX	X.XX	XX	XX	XXXX	XXXX	XXXX
16	7	1984		D7	800	7.7	7.5	7.5	27.4	27.3	27.2							9.5								26	26	35		
19	7	1984		C2																						29	29			
18	7	1984		C3																						26	26			
18	7	1984		C4																						25	25			
18	7	1984		C5																						20	20			
18	7	1984		C6																						30	30			
18	7	1984		C7																						26	26			
18	7	1984		C8																						25	25			
18	7	1984		C9																						33	32			
18	7	1984		D5																						36	36			
18	7	1984		D6																						29	28			
18	7	1984		D7																						32	32			
23	7	1984		C2	800	4.4	4.2	4.2	27.8	27.8	27.8							7.3								30	29	<2.7		
23	7	1984		C3	800	4.8	4.6	4.6	27.7	27.7	27.6							7.6								30	30	<2.7		
23	7	1984		C4	800	5.8	5.4	5.2	27.4	27.3	27.2	32.8	30.0	25.6	25.6			7.6								29	30	<2.7		
23	7	1984		C5	800	5.5	5.3	5.3	27.4	27.3	27.2	34.4	29.4	23.9	25.6			7.5								28	29	38		
23	7	1984		C6	800	5.5	5.1	4.9	27.8	27.7	27.6	32.8	30.0	27.2	27.2			7.7								30	30	<2.7		
23	7	1984		C7	800	5.1	4.8	4.7	27.7	27.7	27.6							7.5								30	30	19		
23	7	1984		C8	800	5.3	5.0	4.9	27.3	27.3	27.2							7.4								30	30	37		
23	7	1984		C9	800	8.6	7.8	7.7	27.3	27.3	27.2							9.5								25	25	67		
23	7	1984		D5	800	6.3	6.2	6.0	28.2	28.2	28.1							9.6								30	30	8		
23	7	1984		D6	800	11.1	10.7	10.2	27.9	27.9	27.8							9.7								25	29	72		
23	7	1984		D7	800	9.7	9.2	9.1	27.8	27.7	27.6							9.8								30	28	24		
25	7	1984		C2																						30	30			
25	7	1984		C3																						29	25			
25	7	1984		C4																						30	29			
25	7	1984		C5																						25	25			
25	7	1984		C6																						29	30			
25	7	1984		C7																						30	29			
25	7	1984		C8																						30	30			
25	7	1984		C9																						25	25			
25	7	1984		D5																						35	35			
25	7	1984		D6																						30	29			
25	7	1984		D7																						25	25			
30	7	1984		C2	800	5.8	5.8	5.7	28.7	28.7	28.7							7.7								35	40	40		
30	7	1984		C3	800	5.1	4.8	4.8	28.5	28.4	28.4							7.6								30	30	29		
30	7	1984		C4	800	7.0	6.6	6.5	28.5	28.3	28.2	32.8	30.0	25.0	25.6			8.1								27	26	3		
30	7	1984		C5	800	7.9	7.3	9.2	28.1	28.0	27.9	35.0	29.4	25.0	24.4			8.5								22	22	69		
30	7	1984		C6	800	5.3	5.1	5.0	28.2	28.1	28.1	32.2	28.9	27.8	27.2			7.8								27	29	<2.7		
30	7	1984		C7	800	5.0	4.7	4.6	28.4	28.4	28.3							7.6								26	28	<2.7		
30	7	1984		C8	800	5.8	5.6	5.5	28.2	28.1	27.6							7.5								35	37	11		
30	7	1984		C9	800	12.0	11.6	11.4	28.1	28.0	27.9							9.8								25	24	80		
30	7	1984		D5	800	8.5	8.4	7.9	29.0	28.9	28.8							9.4								30	35	43		
30	7	1984		D6	800	11.2	10.7	10.6	28.4	28.4	28.4							9.9								29	28	37		
30	7	1984		D7	800	10.6	10.4	10.3	28.7	28.6	28.5							10.0								29	28	35		
1	8	1984		C2																						39	40			
1	8	1984		C3																						25	25			
1	8	1984		C4																						22	25			
1	8	1984		C5																						20	20			

Weekly and Twice Weekly Measurements. Bogor, Indonesia, Cycle I, Dry Season

DATE			EXTRA		D.O.	OXYGEN			POND TEMP.			MAX TEMP		MIN TEMP		ALKA	T.HARD		KJELDAHL	AMMONIA			TOTAL	TOTAL	ORTHO	S.DISK		CHLOROPHYLL		
DAY	MONTH	YEAR	DATA?	POND	SAMPLE TIME	TOP	MID	BOT	TOP	MID	BOT	TOP	BOT	TOP	BOT	mg/l CaCO3	mg/l CaCO3	pH	N mg/l	N mg/l	NO2-N mg/l	NO3-N mg/l	NO2&3-N mg/l	P mg/l	PO4-P mg/l	A cm	B cm	a mg/m3	b mg/m3	c mg/m3
#X	YY	XYXX	Y or N		##XX	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XXX	XXX	XX.X	X.XX	X.XX	X.XX	X.XX	XX.XX	X.XX	X.XX	XX	XX	XXXX	XXXX	X#XX
1	8	1984		C6																						27	26			
1	8	1984		C7																						30	30			
1	8	1984		C8																						40	40			
1	8	1984		C9																						26	27			
1	8	1984		D5																						33	31			
1	8	1984		D6																						30	29			
1	8	1984		D7																						30	31			
6	8	1984		C2																						30	30	13		
6	8	1984		C3																						25	25	16		
6	8	1984		C4								26.7	25.6	27.8	27.8											20	20	56		
6	8	1984		C5								27.8	27.2	27.8	27.8											20	20	29		
6	8	1984		C6								26.7	27.8	27.8	27.2											30	30	37		
6	8	1984		C7																						30	30	8		
6	8	1984		C8																						30	30	5		
6	8	1984		C9																						25	25	35		
6	8	1984		D5																						30	35	<2.7		
6	8	1984		D6																						25	25	27		
6	8	1984		D7																						30	35	3		
8	8	1984		C2	830	6.1	5.9	5.8	27.7	27.8	27.8					14	10	7.9	0.36	0.85	0.05	0.00	0.05	0.18	0.07	30	30			
8	8	1984		C3	830	5.3	5.0	5.0	27.6	27.6	27.6					21	19	7.8	0.72	0.58	0.04	0.05	0.10	0.21	0.07	25	25			
8	8	1984		C4	830	8.8	8.6	8.3	27.0	27.0	27.0					19	17	8.9	0.64	0.15	0.05	0.50	0.54	0.22	0.07	20	21			
8	8	1984		C5	830	6.7	6.4	6.3	26.9	27.0	27.0					19	15	8.6	0.08	0.07	0.04		<.01	0.24	0.09	20	21			
8	8	1984		C6	830	7.0	6.9	6.5	27.5	27.5	27.5					23	21	8.5	0.70	0.20	0.05	0.33	0.42	0.17	0.04	25	28			
8	8	1984		C7	830	7.1	6.9	6.6	27.4	27.5	27.5					20	17	8.2	0.80	0.12	0.05	0.17	0.22	0.20	0.10	25	23			
8	8	1984		C8	830	8.2	7.4	7.2	27.1	27.1	27.0					19	16	8.3	0.78	0.10	0.07	0.01	0.08	0.22	0.08	25	25			
8	8	1984		C9	830	12.1	12.1	12.0	27.3	27.3	27.3					29	23	10.1	0.28	0.07	0.04	0.00	0.04	0.36	0.19	24	25			
8	8	1984		D5	830	9.0	9.0	8.8	27.8	27.7	27.7					46	44	9.7	1.10	0.07	0.05	0.00	0.05	0.32	0.13	30	32			
8	8	1984		D6	830	10.7	10.4	10.4	27.4	27.3	27.2					27	23	10.0	0.14	0.14	0.03	0.01	0.04	0.27	0.11	28	28			
8	8	1984		D7	830	10.9	10.8	10.7	28.0	28.0	28.0					34	30	10.2	1.40	0.04	0.03		<.01	0.35	0.17	29	30			
13	8	1984		C2	800	5.6	5.4	5.4	27.7	27.7	27.7							7.0								30	30	56		
13	8	1984		C3	800	3.9	4.0	3.9	27.2	27.1	27.0							6.5								25	25	16		
13	8	1984		C4	800	5.8	5.6	5.5	27.4	27.3	27.3	32.8	30.0	25.5	25.6			7.0								25	23	<2.7		
13	8	1984		C5	800	5.3	5.0	4.8	27.4	27.4	27.3	35.6	28.9	26.7	26.7			7.0								20	21	<2.7		
13	8	1984		C6	800	5.3	5.0	5.0	27.7	27.6	27.6	34.4	31.1	27.8	27.8			7.0								30	30	19		
13	8	1984		C7	800	4.7	4.6	4.5	27.5	27.5	27.5							6.7								31	31	16		
13	8	1984		C8	800	7.6	7.5	7.3	27.5	27.3	27.2							8.1								25	25	43		
13	8	1984		C9	800	6.3	6.0	5.9	27.4	27.4	27.4							7.4								24	25	27		
13	8	1984		D5	800	6.9	6.4	5.9	27.2	27.1	27.0							7.3								20	20	61		
13	8	1984		D6	800	7.7	7.6	7.4	27.7	27.7	27.6							8.2								28	28	32		
13	8	1984		D7	800	8.7	8.5	8.6	27.7	27.7	27.7							9.0								29	30	51		
15	8	1984		C2																						28	25			
15	8	1984		C3																						25	25			
15	8	1984		C4																						23	25			
15	8	1984		C5																						25	23			
15	8	1984		C6																						25	28			
15	8	1984		C7																						30	33			
15	8	1984		C8																						20	21			
15	8	1984		C9																						25	28			
15	8	1984		D5																						23	20			

Weekly and Twice Weekly Measurements. Bogor, Indonesia, Cycle I, Dry Season

TABLE 3

DATE			EXTRA DATA?	POND	D.O. SAMPLE TIME	OXYGEN			POND TEMP.			MAX TEMP		MIN TEMP		ALKA	T.HARD		KJELDAHL	AMMONIA			TOTAL	TOTAL	ORTHO	S.DISK		CHLOROPHYLL		
						TOP	MID	BOT	TOP	MID	BOT	TOP	BOT	TOP	BOT				N	N	NO2-N	NO3-N	NO2&3-N	P	P04-P	A	B	a	b	c
DAY	MONTH	YEAR				mg/l	mg/l	mg/l	deg C	deg C	deg C	deg C	deg C	deg C	deg C	CaCO3	CaCO3	pH	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	cm	cm	mg/m3	mg/m3	mg/m3
XX	XX	XXXX	Y or N		XXX	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XXX	XXX	XX.X	X.XX	X.XX	X.XX	X.XX	XX.XX	X.XX	X.XX	XX	XX	XXXX	XXXX	XXXX
15	8	1984		D6																						25	28			
15	8	1984		D7																						25	25			
20	8	1984		C2	800	4.8	4.7	4.7	28.1	28.1	28.1							7.2								30	28	58		
20	8	1984		C3	800	4.2	3.9	3.8	28.2	28.1	28.1							7.1								27	25	26		
20	8	1984		C4	800	5.0	4.9	4.9	27.7	27.7	27.7	35.6	28.9	26.7	27.8			7.1								22	22	21		
20	8	1984		C5	800	5.3	5.1	5.1	27.8	27.8	27.7	35.6	28.9	26.7	25.6			7.3								20	20	29		
20	8	1984		C6	800	4.5	4.3	4.2	27.9	27.8	27.7	35.6	30.0	28.0	26.0			7.2								22	22	19		
20	8	1984		C7	800	4.5	4.4	4.4	28.2	28.2	28.1							7.2								32	32	19		
20	8	1984		C8	800	5.3	5.3	5.2	27.8	27.7	27.6							7.3								20	20	<2.7		
20	8	1984		C9	800	8.1	5.2	5.2	28.1	28.1	28.0							8.4								39	38	56		
20	8	1984		D5	800	6.6	6.3	6.0	27.9	27.8	27.7							9.3								28	28	24		
20	8	1984		D6	800	7.3	7.1	7.1	28.5	28.4	28.4							9.1								35	35	37		
20	8	1984		D7	800	8.2	8.2	8.0	28.4	28.4	28.3							9.5								30	30	24		
22	8	1984		C2																						25	25			
22	8	1984		C3																						25	25			
22	8	1984		C4																						22	24			
22	8	1984		C5																						20	22			
22	8	1984		C6																						25	25			
22	8	1984		C7																						30	32			
22	8	1984		C8																						30	30			
22	8	1984		C9																						36	40			
22	8	1984		D5																						25	25			
22	8	1984		D6																						32	34			
22	8	1984		D7																						30	30			
27	8	1984		C2	800	5.0	4.9	4.9	28.3	23.0	28.3							8.1								28	30	139		
27	8	1984		C3	800	4.7	4.7	4.6	28.1	28.1	28.1							8.0								25	25	99		
27	8	1984		C4	800	5.8	5.6	5.6	28.2	28.2	28.2	32.2	30.0	27.8	26.7			8.0								28	30	45		
27	8	1984		C5	800	5.8	5.7	5.5	27.7	27.7	27.7	34.4	28.9	25.6	25.6			8.0								23	23	27		
27	8	1984		C6	800	5.4	5.3	5.3	28.1	28.1	28.1	30.0	30.0	26.7	26.7			8.0								30	30	21		
27	8	1984		C7	800	5.9	5.8	5.8	28.3	28.3	28.3							8.1								30	30	<2.7		
27	8	1984		C8	800	5.3	5.1	5.1	28.0	28.0	27.8							8.0								33	30	67		
27	8	1984		C9	800	5.6	5.6	5.6	28.8	28.8	28.8							9.5								40	40	40		
27	8	1984		D5	800	5.9	5.8	5.8	27.9	27.9	27.9							9.7								30	30	5		
27	8	1984		D6	800	7.0	7.0	7.0	28.2	28.2	28.2							10.0								30	30	<2.7		
27	8	1984		D7	800	7.4	7.4	7.4	28.6	28.6	28.6							10.4								30	30	64		
29	8	1984		C2																						31	32			
29	8	1984		C3																						22	23			
29	8	1984		C4																						29	29			
29	8	1984		C5																						25	25			
29	8	1984		C6																						25	24			
29	8	1984		C7																						30	30			
29	8	1984		C8																						35	35			
29	8	1984		C9																						40	40			
29	8	1984		D5																						25	25			
29	8	1984		D6																						30	30			
29	8	1984		D7																						30	30			
3	9	1984		C2																						35	35	<2.7		
3	9	1984		C3																						25	25	35		
3	9	1984		C4								33.3	30.0	25.6	25.6											25	28	45		

Weekly and Twice Weekly Measurements. Bogor, Indonesia, Cycle I, Dry Season

DATE			EXTRA		D.O.	OXYGEN			POND TEMP.			MAX TEMP		MIN TEMP		ALKA	T.HARD		KJELDAHL	AMMONIA			TOTAL	TOTAL	ORTHO	S.DISK		CHLOROPHYLL		
DAY	MONTH	YEAR	DATA?	POND	SAMPLE TIME	TOP	MID	BOT	TOP	MID	BOT	TOP	BOT	TOP	BOT	mg/l CaCO3	mg/l CaCO3	pH	N mg/l	N mg/l	NO2-N mg/l	NO3-N mg/l	NO2&3-N mg/l	P mg/l	PO4-P mg/l	A cm	B cm	a mg/m3	b mg/m3	c mg/m3
XX	XX	XXXX	Y or N		XXXX	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XXX	XXX	XX.X	X.XX	X.XX	X.XX	X.XX	XX.XX	X.XX	X.XX	XX	XX	XXXX	XXXX	XXXX
3	9	1984		C5								34.4	28.9	25.6	25.6											25	25	53		
3	9	1984		C6								31.1	28.9	26.7	26.7											25	23	59		
3	9	1984		C7																						30	35	43		
3	9	1984		C8																						30	30	16		
3	9	1984		C9																						42	42	67		
3	9	1984		D5																						25	25	45		
3	9	1984		D6																						35	32	35		
3	9	1984		D7																						33	35	5		
4	9	1984		C2	830	5.7	5.6	5.5	27.5	27.6	27.6					9	7	8.1	1.67	0.22	0.04	0.06	0.10	0.13	0.09					
4	9	1984		C3	830	4.8	4.6	4.3	27.1	27.2	27.1					16	14	8.1	0.57	0.31	0.03	<.01	0.02	0.11	0.07					
4	9	1984		C4	830	5.9	5.8	5.6	27.0	27.1	27.0					17	15	8.2	0.72	0.37	0.04	0.06	0.10	0.07	0.04					
4	9	1984		C5	830	5.8	5.6	5.3	27.1	27.1	27.1					17	14	8.3	0.78	0.43	0.05	<.01	0.05	0.21	0.08					
4	9	1984		C6	830	5.4	5.2	5.0	27.2	27.3	27.3					19	18	8.2	1.57	0.43	0.04	0.02	0.06	0.12	0.06					
4	9	1984		C7	830	6.2	6.1	5.9	27.5	27.5	27.5					16	13	8.4	0.27	0.28	0.03	0.04	0.07	0.08	0.05					
4	9	1984		C8	830	6.0	5.9	5.8	27.2	27.2	27.2					16	13	8.6	0.53	0.44	0.04	0.04	0.07	0.08	0.06					
4	9	1984		C9	830	6.4	6.2	6.1	27.4	27.5	27.5					35	32	9.2	0.98	0.88	0.03	<.01	0.02	0.17	0.09					
4	9	1984		D5	830	6.6	6.4	6.0	26.9	26.8	26.8					33	30	8.7	0.59	0.37	0.04	<.01	0.04	0.15	0.08					
4	9	1984		D6	830	8.0	7.7	7.6	27.3	27.4	27.4					29	26	9.5	0.43	0.28	0.02	<.01	0.02	0.21	0.11					
4	9	1984		D7	830	6.9	6.9	6.9	27.5	27.5	27.5					31	26	9.7	0.32	0.26	0.02	<.01	0.02	0.24	0.14					
5	9	1984		C2																						27	30			
5	9	1984		C3																						25	25			
5	9	1984		C4																						29	30			
5	9	1984		C5																						26	27			
5	9	1984		C6																						25	23			
5	9	1984		C7																						32	33			
5	9	1984		C8																						30	30			
5	9	1984		C9																						37	40			
5	9	1984		D5																						25	25			
5	9	1984		D6																						30	30			
5	9	1984		D7																						34	34			
10	9	1984		C2	800	6.2	5.6	5.2	27.0	26.6	26.5							7.6								30	30	8		
10	9	1984		C3	800	6.8	5.8	5.3	26.8	26.3	26.2							7.7								25	26	32		
10	9	1984		C4	800	7.2	6.7	6.3	27.2	26.8	26.7	33.3	27.8	26.7	28.8			6.8								30	29	32		
10	9	1984		C5	800	7.9	6.6	6.0	26.7	26.3	26.3	34.4	28.8	27.8	27.8			8.0								19	20	77		
10	9	1984		C6	900	6.8	6.2	5.4	27.4	26.9	26.8	30.0	27.8	26.7	26.7			7.6								25	23	19		
10	9	1984		C7	800	7.4	6.8	6.4	27.5	27.0	26.9							7.6								32	32	27		
10	9	1984		C8	900	7.3	7.0	6.6	27.3	26.6	26.5							7.4								28	30	21		
10	9	1984		C9	800	7.9	7.4	7.1	27.0	27.2	26.5							7.4								25	28	53		
10	9	1984		D5	900	8.0	7.3	6.8	27.4		26.6							9.2								28	28	19		
10	9	1984		D6	800	7.6	7.0	6.5	27.4	26.7	26.5							9.3								30	30	43		
10	9	1984		D7	900	7.7	7.1	6.8	27.6	26.6	27.1							7.4								32	32	32		
12	9	1984		C2																						30	30			
12	9	1984		C3																						23	23			
12	9	1984		C4																						25	28			
12	9	1984		C5																						20	20			
12	9	1984		C6																						28	25			
12	9	1984		C7																						32	35			
12	9	1984		C8																						23	23			
12	9	1984		C9																						25	25			

Weekly and Twice Weekly Measurements. Bogor, Indonesia, Cycle I, Dry Season

DATE			EXTRA		D.O.	OXYGEN			POND TEMP.			MAX TEMP		MIN TEMP		ALKA	T.HARD		KJELDAHL	AMMONIA			TOTAL	TOTAL	ORTHO	S.DISK		CHLOROPHYLL		
DAY	MONTH	YEAR	DATA?	POND	SAMPLE TIME	TOP	MID	BOT	TOP	MID	BOT	TOP	BOT	TOP	BOT				N	N	NO2-N	NO3-N	NO2&3-N	P	PO4-P	A	B	a	b	c
XX	XX	XXXX	Y or N		XXX	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	mg/l CaCO3 XXX	mg/l CaCO3 XXX	pH XX.X	mg/l X.XX	mg/l X.XX	mg/l X.XX	mg/l X.XX	mg/l XX.XX	mg/l X.XX	mg/l X.XX	cm XX	cm XX	mg/m3 XXXX	mg/m3 XYXX	mg/m3 XXXX
12	9	1984		D5																					28	28			
12	9	1984		D6																					30	30			
12	9	1984		D7																					35	35			
17	9	1984		C2	800	5.7	5.5	5.3	27.4	27.3	27.3							6.9							35	33	29		
17	9	1984		C3	800	6.4	6.2	5.9	27.4	27.3	27.2							7.1							30	32	45		
17	9	1984		C4	800	7.3	7.0	6.7	27.0	26.9	26.9	32.2	28.9	26.7	26.7			7.3							30	31	5		
17	9	1984		C5	800	6.8	6.5	6.2	27.0	26.9	26.8	34.4	27.2	28.9	25.6			8.1							23	25	8		
17	9	1984		C6	800	5.5	5.2	5.0	27.5	27.4	27.2	29.4	27.8	26.7	26.7			7.8							28	29	32		
17	9	1984		C7	800	6.2	5.7	5.8	27.6	27.5	27.4							7.7							40	41	16		
17	9	1984		C8	800	7.3	7.1	6.6	27.3	27.2	27.1							7.8							35	38	40		
17	9	1984		C9	800	8.8	8.5	7.7	27.3	27.2	27.0							9.6							32	34	32		
17	9	1984		D5	800	8.1	7.5	7.4	27.2	27.0	26.9							9.5							28	28	29		
17	9	1984		D6	800	7.7	7.3	6.9	27.6	27.4	27.3							9.4							40	41	35		
17	9	1984		D7	800	7.8	7.6	7.5	27.9	27.7	27.7							9.6							43	43	32		
19	9	1984		C2								27.6													38	38			
19	9	1984		C3								27.2													31	31			
19	9	1984		C4																					30	30			
19	9	1984		C5																					25	25			
19	9	1984		C6																					30	28			
19	9	1984		C7																					40	35			
19	9	1984		C8																					35	32			
19	9	1984		C9																					32	30			
19	9	1984		D5																					28	28			
19	9	1984		D6																					35	35			
19	9	1984		D7																					38	40			
24	9	1984		C2	800	5.9	5.5	5.4	28.3	28.3	28.3							7.6							40	40	8		
24	9	1984		C3	800	6.4	5.9	5.9	28.3	28.3	28.2							7.7							38	38	32		
24	9	1984		C4	800	7.8	7.0	6.8	28.5	28.4	28.3	33.3	28.9	27.2	26.7			8.2							31	31	27		
24	9	1984		C5	800	6.9	6.2	6.0	28.1	27.9	27.8	35.6	35.0	25.6	25.6			8.2							25	28	11		
24	9	1984		C6	800	6.8	6.3	5.8	28.3	28.2	28.1	34.4	28.9	26.7	26.7			8.0							30	30	123		
24	9	1984		C7	800	6.9	6.6	6.3	28.4	28.4	28.3							7.8							42	40	75		
24	9	1984		C8	800	6.1	5.9	5.8	28.4	28.3	28.2							7.7							38	410	64		
24	9	1984		C9	800	11.6	11.0	10.7	28.3	28.2	28.2							9.9							32	32	69		
24	9	1984		D5	800	11.2	9.9	9.6	28.1	27.8	27.7							9.7							25	25	96		
24	9	1984		D6	800	9.8	9.4	8.8	28.7	28.6	28.6							9.6							40	40	96		
24	9	1984		D7	800	10.0	9.8	9.5	29.1	29.0	29.0							9.8							45	45	75		
26	9	1984		C2																					39	40			
26	9	1984		C3																					38	38			
26	9	1984		C4																					30	30			
26	9	1984		C5																					24	25			
26	9	1984		C6																					29	30			
26	9	1984		C7																					40	40			
26	9	1984		C8																					35	35			
26	9	1984		C9																					32	30			
26	9	1984		D5																					24	23			
26	9	1984		D6																					39	40			
26	9	1984		D7																					45	43			
1	10	1984		C2																					40	40	13		
1	10	1984		C3																					35	38	21		

Weekly and Twice Weekly Measurements. Bogor, Indonesia, Cycle I, Dry Season

DATE			EXTRA DATA?	POND	D.O. SAMPLE TIME	OXYGEN			POND TEMP.			MAX TEMP		MIN TEMP		ALKA	T.HARD		KJELDAHL	AMMONIA				TOTAL	TOTAL	ORTHO	S.DISK		CHLOROPHYLL		
						TOP	MID	BOT	TOP	MID	BOT	TOP	BOT	TOP	BOT									NO2&3-N	P	PO4-P	A	B	a	b	c
DAY	MONTH	YEAR				mg/l	mg/l	mg/l	deg C	deg C	deg C	deg C	deg C	deg C	deg C	mg/l	mg/l		N	N	NO2-N	NO3-N	mg/l	mg/l	mg/l	cm	cm	mg/m3	mg/m3	mg/m3
XX	XX	XXXX	Y or N		XXXX	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	CaCO3	CaCO3	pH	X.XX	X.XX	X.XX	X.XX	XX.XX	X.XX	X.XX	XX	XX	XXX	XXX	XXXX
1	10	1984		C4								34.4	30.0	28.9	27.8												25	30	24		
1	10	1984		C5								34.4	29.4	27.8	27.8												25	28	14		
1	10	1984		C6								31.1	30.0	28.3	27.8												28	28	16		
1	10	1984		C7																							42	42	21		
1	10	1984		C8																							40	38	96		
1	10	1984		C9																							35	35	67		
1	10	1984		D5																							25	28	56		
1	10	1984		D6																							32	32	13		
1	10	1984		D7																							35	35	<2.7		
3	10	1984		C2	830	5.1	5.0	4.8	28.5	28.5	28.5					11	10	7.2	1.00	0.15	0.05	0.06	0.11	1.66	0.10	35	35			
3	10	1984		C3	830	5.5	5.1	5.1	28.3	28.3	28.1					20	18	7.3	0.58	0.07	0.03	0.04	0.07	0.84	0.04	35	35			
3	10	1984		C4	830	5.4	5.2	5.1	28.0	27.9	27.8					21	19	7.4	0.85	0.05	0.04	0.23	0.27	0.95	0.02	23	24			
3	10	1984		C5	830	5.8	5.4	4.9	28.0	27.9	27.9					22	20	7.5	0.40	0.05	0.04	<BD	0.04	0.84	0.09	25	28			
3	10	1984		C6	830	5.3	4.7	4.2	27.8	27.8	27.6					23	22	7.4	0.66	0.08	0.04	0.08	0.12	1.50	0.03	30	30			
3	10	1984		C7	830	5.3	5.1	4.9	28.1	28.1	28.0					15	12	7.3	0.47	0.11	0.04	0.02	0.06	0.15	0.07	40	40			
3	10	1984		C8	830	5.7	5.3	5.3	28.2	28.1	28.0					17	13	7.3	0.29	0.11	0.04	0.03	0.07	0.25	0.11	35	35			
3	10	1984		C9	830	9.4	9.1	38.6	28.4	28.3	28.3					31	30	9.5	0.65	<BD	0.01	0.02	0.02	0.35	0.25	35	35			
3	10	1984		D5	830	6.1	5.8	5.6	27.5	27.2	27.1					30	28	8.6	0.71	0.07	0.04	<BD	0.02	0.14	0.02	25	28			
3	10	1984		D6	830	9.4	9.1	8.2	28.5	28.3	28.2					32	31	9.4	1.04	0.02	0.03	<BD	0.02	0.99	0.17	30	30			
3	10	1984		D7	830	7.2	6.1	5.8	28.2	28.1	27.9					32	31	9.0	0.87	0.03	0.03	0.00	0.03	0.20	0.10	35	34			
8	10	1984		C2	800	4.3	4.3	4.2	28.5	28.7	28.7							6.8								32	35	16		
8	10	1984		C3	800	4.7	4.6	4.3	28.6	28.6	28.6							6.9								35	35	24		
8	10	1984		C4	800	5.2	4.9	4.9	27.5	27.5	27.5	32.2	30.0	27.8	28.3			7.1								24	25	40		
8	10	1984		C5	800	4.9	4.5	4.8	28.0	28.1	28.1	36.7	30.0	27.2	26.7			7.2								22	22	37		
8	10	1984		C6	800	6.2	6.1	5.2	28.6	28.6	28.5	34.4	30.0	27.8	26.7			7.9								25	22	32		
8	10	1984		C7	800	5.7	5.7	5.6	28.6	28.6	28.6							7.4								35	38	5		
8	10	1984		C8	800	5.3	5.3	4.8	28.5	28.5	28.5							7.1								35	35	11		
8	10	1984		C9	800	7.8	7.7	7.7	28.8	29.0	29.0							9.2								35	35	8		
8	10	1984		D5	800	8.5	8.2	7.6	28.4	28.4	28.4							8.8								30	30	48		
8	10	1984		D6	800	5.2	4.0	3.9	28.2	28.3	28.2							9.0								30	30	32		
8	10	1984		D7	800	7.1	6.8	5.9	28.6	28.7	28.7							9.2								30	31	329		
10	10	1984		C2																							30	30			
10	10	1984		C3																							33	33			
10	10	1984		C4																							20	19			
10	10	1984		C5																							21	20			
10	10	1984		C6																							25	28			
10	10	1984		C7																							32	32			
10	10	1984		C8																							28	30			
10	10	1984		C9																							35	38			
10	10	1984		D5																							24	25			
10	10	1984		D6																							21	20			
10	10	1984		D7																							23	25			
15	10	1984		C2	800	5.1	4.8	4.4	27.7	27.6	27.6							6.7								28	30			
15	10	1984		C3	800	5.1	4.7	4.3	27.6	27.6	27.6							6.8								32	32			
15	10	1984		C4	800	6.2	5.6	5.5	27.5	27.3	27.3	35.6	31.1	28.3	28.3			7.4								25	25			
15	10	1984		C5	800	5.6	5.1	4.5	27.5	27.3	27.3	36.1	30.0	26.7	26.7			7.2								23	23			
15	10	1984		C6	800	6.3	5.4	5.2	27.9	27.7	27.6	36.1	34.4	27.8	27.8			7.3								25	25			
15	10	1984		C7	800	5.5	5.2	4.6	27.8	27.6	27.4							7.1								31	31			
15	10	1984		C8	800	36.1	5.8	5.4	27.5	27.4	27.3							7.0								28	28			

Weekly and Twice Weekly Measurements. Bogor, Indonesia, Cycle I, Dry Season

DATE			EXTRA DATA?	POND	D.O. SAMPLE TIME	OXYGEN			POND TEMP.			MAX TEMP		MIN TEMP		ALKA	T.HARD	pH	KJELDAHL N	AMMONIA N	NO2-N	NO3-N	TOTAL NO2&3-N	TOTAL P	ORTHO PO4-P	S.DISK		CHLOROPHYLL		
						TOP	MID	BOT	TOP	MID	BOT	TOP	BOT	TOP	BOT											A	B	a	b	c
DAY	MONTH	YEAR				mg/l	mg/l	mg/l	deg C	deg C	deg C	deg C	deg C	deg C	deg C	mg/l	mg/l		mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	cm	cm	mg/m3	mg/m3	mg/m3
XX	XX	XXXX	Y or N		XXXX	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XXX	XXX	XX.X	X.XX	X.XX	X.XX	X.XX	XX.XX	X.XX	X.XX	XX	XX	XXXX	XXXX	XXXX
15	10	1984		C1	800	7.1	6.4	6.3	28.3	28.2	28.1							8.8								40	42			
15	10	1984		D5	800	6.7	5.9	5.5	27.5	27.3	27.2							8.7								25	28			
15	10	1984		D6	800	8.0	7.4	7.0	27.9	27.7	27.7							9.2								30	30			
15	10	1984		D7	800	8.0	7.0	6.5	28.1	27.9	27.8							9.1								28	30			
17	10	1984		C2																						30	30	19		
17	10	1984		C3																						28	31	8		
17	10	1984		C4																						22	22	37		
17	10	1984		C5																						22	22	43		
17	10	1984		C6																						25	25	40		
17	10	1984		C7																						32	32	8		
17	10	1984		C8																						29	30	21		
17	10	1984		C9																						40	42	16		
17	10	1984		D5																						25	25	45		
17	10	1984		D6																						30	31	27		
17	10	1984		D7																						32	30	53		
22	10	1984		C2	800	4.8	4.1	3.8	29.1	29.0	28.9							6.9								28	28	11		
22	10	1984		C3	800	4.6	4.3	3.9	28.8	28.6	28.5							6.9								35	32	13		
22	10	1984		C4	800	5.6	5.2	4.7	28.1	27.8	27.8	31.1	30.6	27.8	27.8			7.1								20	20	29		
22	10	1984		C5	800	5.5	5.0	4.5	28.1	27.8	27.7	34.7	30.0	27.8	26.7			7.0								20	22	19		
22	10	1984		C6	800	6.3	5.3	4.8	28.6	28.5	28.3	35.6	33.3	27.8	27.8			7.4								23	23	51		
22	10	1984		C7	800	5.7	5.3	4.4	28.9	28.6	28.5							7.4								34	31	19		
22	10	1984		C8	800	5.7	5.4	5.0	28.8	28.5	28.3							7.4								29	30	19		
22	10	1984		C9	800	7.3	6.5	6.3	29.5	29.3	29.3							8.9								42	43	<2.7		
22	10	1984		D5	800	3.5	3.2	3.0	29.0	28.7	28.5							8.4								30	28	19		
22	10	1984		D6	800	8.0	7.2	6.9	29.2	29.0	28.9							9.1								32	33	<2.7		
22	10	1984		D7	800	5.4	5.0	4.4	29.2	29.0	28.8							8.9								35	35	29		
24	10	1984		C2																						30	30			
24	10	1984		C3																						32	31			
24	10	1984		C4																						21	20			
24	10	1984		C5																						21	21			
24	10	1984		C6																						21	20			
24	10	1984		C7																						30	30			
24	10	1984		C8																						32	31			
24	10	1984		C9																						43	41			
24	10	1984		D5																						32	30			
24	10	1984		D6																						38	38			
24	10	1984		D7																						32	31			
1	11	1984		C2	800	4.7	4.2	3.8	28.1	28.0	27.8							7.2								28	25	85		
1	11	1984		C3	800	5.2	4.6	4.5	27.8	27.5	27.4							7.4								25	28	32		
1	11	1984		C4	800	5.3	5.1	4.9	27.8	27.7	27.6	34.4	30.0	27.8	26.7			7.7								23	25	24		
1	11	1984		C5	800	4.6	4.2	4.1	27.9	27.4	27.3	33.3	28.9	26.1	25.6			7.6								22	23	21		
1	11	1984		C6	800	4.8	4.4	4.4	27.9	27.7	27.5	28.3	29.4	27.8	33.3			7.6								28	25	43		
1	11	1984		C7	800	6.3	5.5	5.0	27.5	27.4	27.0							7.7								23	23	5		
1	11	1984		C8	800	5.9	5.7	5.3	27.8	27.7	27.5							7.6								32	30	21		
1	11	1984		C9	800	7.5	7.2	6.9	28.4	28.4	28.3							8.8								42	42	64		
1	11	1984		D5	800	5.1	4.5	4.4	28.4	28.3	28.1							8.6								42	35	21		
1	11	1984		D6	800	4.9	4.5	4.6	28.9	28.4	28.2							8.6								50	50	29		
1	11	1984		D7	800	7.7	6.9	6.8	28.4	28.2	27.7							9.1								35	35	24		
5	11	1984		C2																						25	25			

Weekly and Twice Weekly Measurements. Bogor, Indonesia, Cycle I, Dry Season

DATE			EXTRA		D.O.	OXYGEN			POND TEMP.			MAX TEMP		MIN TEMP		ALKA	T.HARD		KJELDAHL	AMMONIA			TOTAL	TOTAL	ORTHO	S.DISK		CHLOROPHYLL		
DAY	MONTH	YEAR	DATA?	POND	SAMPLE TIME	TOP	MID	BOT	TOP	MID	BOT	TOP	BOT	TOP	BOT				N	N	NO2-N	NO3-N	NO2&3-N	P	PO4-P	A	B	a	b	c
XX	XX	XXXX	Y or N		XXXX	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X		mg/l CaCO3	mg/l CaCO3		mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	cm	cm	mg/m3	mg/m3	mg/m3
5	11	1984		C3																						23	23			
5	11	1984		C4																						20	23			
5	11	1984		C5																						23	20			
5	11	1984		C6																						23	23			
5	11	1984		C7																						22	22			
5	11	1984		C8																						32	32			
5	11	1984		C9																						40	40			
5	11	1984		D5																						33	38			
5	11	1984		D6																						45	48			
5	11	1984		D7																						35	32			

Diurnal Measurements. Bogor, Indonesia, Cycle I, Wet Season

DATE			TIME		OXYGEN			POND TEMP.			
DAY	MONTH	YEAR	OF DAY	POND	TOP mg/l	MID mg/l	BOT mg/l	TOP deg C	MID deg C	BOT deg C	pH
XX	XX	XXXX	XXXX		XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X
2	11	1983	600	C1		5.8			27.3		6.8
2	11	1983	1000	C1	7.6	6.1	5.5	28.2	27.8	27.6	6.6
2	11	1983	1430	C1	10.8	7.9	6.1	32.2	29.8	28.4	7.1
2	11	1983	1930	C1	7.9	7.3	6.7	29.2	29.2	28.8	7.1
3	11	1983	30	C1	6.4	6.4	5.6	28.1	28.1	28.1	6.9
3	11	1983	430	C1	5.9	5.7	5.1	27.4	27.6	27.7	6.0
2	11	1983	600	C2		4.7			27.7		6.4
2	11	1983	1000	C2	6.4	5.6	5.1	28.7	28.0	27.8	6.7
2	11	1983	1430	C2	10.0	6.6	5.4	32.8	30.2	28.7	7.7
2	11	1983	1930	C2	7.3	6.9	6.6	29.3	29.4	29.1	7.2
3	11	1983	30	C2	6.2	6.1	5.8	28.1	28.2	28.1	6.7
3	11	1983	430	C2	5.2	5.0	4.8	27.7	27.7	28.8	6.1
2	11	1983	600	C3		5.3			26.9		6.6
2	11	1983	1000	C3	7.6	5.6	5.6	27.6	27.3	27.2	7.6
2	11	1983	1430	C3	11.6	6.2	6.1	31.1	28.9	28.5	8.6
2	11	1983	1930	C3	8.2	7.9	7.7	28.7	28.8	28.6	8.4
3	11	1983	30	C3	6.5	6.5	6.5	27.6	27.8	27.8	6.8
3	11	1983	430	C3	5.9	5.7	5.6	27.2	27.3	27.3	6.2
2	11	1983	600	C4		5.6			27.8		6.4
2	11	1983	1000	C4	7.2	6.2	5.9	29.1	28.3	28.1	6.9
2	11	1983	1430	C4	8.0	6.2	5.8	31.5	29.8	29.3	7.8
2	11	1983	1930	C4	7.6	7.6	7.3	29.4	29.4	29.5	7.4
3	11	1983	30	C4	6.4	6.3	6.2	28.3	28.5	28.6	6.6
3	11	1983	430	C4	6.0	6.0	5.5	27.8	28.0	28.0	6.2
2	11	1983	600	C5		5.7			27.6		6.4
2	11	1983	1000	C5	7.5	7.2	7.1	28.6	28.2	28.1	6.9
2	11	1983	1430	C5	8.5	7.2	7.1	37.0	29.8	29.0	7.5
2	11	1983	1930	C5	7.7	7.7	7.6	29.3	29.4	29.5	6.9
3	11	1983	30	C5	6.6	6.5	6.4	28.3	28.5	28.5	6.3
3	11	1983	430	C5	6.2	6.1	5.9	27.6	27.8	27.8	6.2
2	11	1983	600	C6		5.7			27.3		6.6
2	11	1983	1000	C6	8.0	6.2	5.7	29.0	27.8	27.7	6.9
2	11	1983	1430	C6	9.1	7.6	5.9	30.9	29.9	28.5	8.0
2	11	1983	1930	C6	8.2	8.1	8.0	29.0	29.0	27.8	7.1
3	11	1983	30	C6	6.7	6.6	6.6	27.8	28.0	28.1	6.5
3	11	1983	430	C6	6.1	6.1	6.0	27.5	27.7	27.7	6.2
2	11	1983	600	C7		6.0			26.6		6.5
2	11	1983	1000	C7	6.6	6.0	5.7	28.1	27.1	26.6	6.9
2	11	1983	1430	C7	9.0	7.2	5.0	31.3	28.7	27.3	7.3
2	11	1983	1930	C7	7.8	7.8	5.7	28.7	29.0	27.8	6.8
3	11	1983	30	C7	6.7	6.5	4.4	27.7	27.7	27.8	6.5
3	11	1983	430	C7	5.9	5.9	5.9	27.2	27.4	27.4	6.3
2	11	1983	600	C8		5.8			26.7		6.6
2	11	1983	1000	C8	7.0	5.6	4.4	27.8	27.1	27.0	6.9
2	11	1983	1430	C8	10.1	5.2	4.9	32.0	27.5	27.3	7.8
2	11	1983	1930	C8	7.7	7.3	6.4	28.3	28.5	28.3	6.9
3	11	1983	30	C8	6.1	6.1	6.1	27.5	27.7	27.7	6.5
3	11	1983	430	C8	5.7	5.6	5.5	27.2	27.3	27.2	6.6
2	11	1983	600	C9		5.6			27.0		6.8
2	11	1983	1000	C9	6.4	5.6	5.4	27.9	27.4	27.1	6.9
2	11	1983	1430	C9	8.6	5.0	4.7	29.8	27.6	27.3	7.3
2	11	1983	1930	C9	7.3	6.5	5.0	28.1	28.3	27.8	6.9
3	11	1983	30	C9	5.7	5.7	5.7	27.4	27.5	27.5	6.5
3	11	1983	430	C9	5.4	5.4	5.4	27.0	27.1	27.1	6.5
2	11	1983	600	D7		5.6			26.9		6.9
2	11	1983	1000	D7	6.5	5.6	5.5	27.9	27.4	27.1	7.0
2	11	1983	1430	D7	9.6	5.6	4.7	29.8	28.4	27.3	8.1
2	11	1983	1930	D7	7.3	6.5	5.0	28.1	28.6	27.8	6.7
3	11	1983	30	D7	5.7	5.7	5.7	27.4	27.8	27.5	6.4
3	11	1983	430	D7	5.4	6.4	5.3	27.0	27.3	27.1	6.5
2	11	1983	600	D6		5.5			26.9		6.6
2	11	1983	1000	D6	6.8	5.2	5.1	28.2	27.3	26.9	6.9
2	11	1983	1430	D6	8.8	5.0	4.7	30.0	27.9	27.5	7.2
2	11	1983	1930	D6	7.2	6.5	5.7	28.3	28.4	28.1	6.7
3	11	1983	30	D6	5.9	5.9	5.8	27.4	27.6	27.6	6.4
3	11	1983	430	D6	5.5	5.4	5.4	27.0	27.1	27.1	6.4
2	11	1983	600	D5		5.9			26.6		6.7
2	11	1983	1030	D5	6.9	5.8	5.9	27.9	27.1	26.8	6.9
2	11	1983	1500	D5	9.5	5.4	5.2	30.3	27.6	27.4	7.3
2	11	1983	2000	D5	7.3	7.3	7.6	28.2	28.4	28.4	6.6
3	11	1983	30	D5	6.1	6.1	6.1	27.5	27.6	27.7	6.5
3	11	1983	430	D5	5.7	5.7	5.7	27.0	27.1	27.1	6.4
30	11	1983	830	C1	7.8	7.1	6.8	27.4	27.2	27.0	8.1
30	11	1983	1230	C1	10.7	8.2	7.5	28.3	27.8	27.4	8.8
30	11	1983	1630	C1	14.8	9.4	8.2	29.3	28.8	28.0	8.9
30	11	1983	2030	C1	11.0	10.2	8.1	28.0	28.2	28.2	8.4
1	12	1983	30	C1	9.6	9.6	9.5	27.5	27.6	27.6	8.3
1	12	1983	430	C1	8.6	8.5	8.3	27.6	27.0	27.0	7.3
30	11	1983	830	C2	7.4	6.8	6.7	27.4	27.2	27.2	8.3
30	11	1983	1230	C2	11.7	7.9	7.5	28.8	28.0	27.6	8.8
30	11	1983	1630	C2	13.0	8.8	8.0	29.7	28.9	28.2	8.8
30	11	1983	2030	C2	10.1	10.1	10.1	28.4	28.5	28.5	8.4
1	12	1983	30	C2	9.2	9.2	9.1	27.6	27.7	27.7	8.4
1	12	1983	430	C2	8.1	8.1	7.8	27.0	27.0	27.0	7.9
30	11	1983	830	C3	7.1	6.3	6.2	27.4	27.2	27.1	7.4
30	11	1983	1230	C3	9.9	7.2	7.1	28.5	28.0	27.7	8.1
30	11	1983	1630	C3	12.8	8.2	7.9	29.5	29.0	28.5	8.9
30	11	1983	2030	C3	9.3	9.3	9.2	28.3	28.5	28.5	8.3
1	12	1983	30	C3	8.3	8.3	8.2	27.5	27.7	27.7	7.9
1	12	1983	430	C3	7.4	7.4	7.4	27.0	27.0	27.1	7.4
30	11	1983	830	C4	5.9	5.7	5.7	26.1	25.9	25.9	7.1
30	11	1983	1230	C4	7.4	6.0	5.7	27.7	27.1	26.5	7.6
30	11	1983	1630	C4	10.4	5.4	5.3	29.2	27.8	26.9	8.4
30	11	1983	2030	C4	10.4	5.5	4.3	27.9	27.7	27.1	7.9
1	12	1983	30	C4	7.4	7.2	6.4	27.0	27.1	27.1	7.3
1	12	1983	430	C4	7.3	7.3	7.2	26.5	26.6	26.6	7.0
30	11	1983	830	C5	7.2	6.5	6.4	27.4	26.8	26.7	7.3
30	11	1983	1230	C5	10.1	7.7	6.8	28.4	27.4	27.1	8.1

TABLE 4

TABLE 4

Diurnal Measurements. Bogor, Indonesia, Cycle I, Wet Season

DATE			TIME		OXYGEN			POND TEMP.			
DAY	MONTH	YEAR	OF DAY	POND	TOP mg/l	MID mg/l	BOT mg/l	TOP deg C	MID deg C	BOT deg C	pH
XX	XX	XXXX	XXXX		XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X
30	11	1983	1630	C5	12.8	8.3	7.5	29.5	28.1	27.6	8.7
30	11	1983	2030	C5	10.7	8.6	7.0	28.2	28.2	28.0	8.0
1	12	1983	30	C5	9.0	9.0	9.0	27.3	27.5	27.5	7.8
1	12	1983	430	C5	8.0	8.0	8.0	26.7	26.9	26.9	7.2
30	11	1983	830	C6	9.9	9.0	8.7	27.9	27.6	27.5	8.8
30	11	1983	1230	C6	12.5	11.4	9.3	28.9	28.2	27.8	9.0
30	11	1983	1630	C6	14.4	13.0	10.4	29.8	29.4	28.1	9.3
30	11	1983	2030	C6	12.5	12.5	9.5	28.4	28.6	28.3	8.9
1	12	1983	30	C6	10.8	10.8	10.8	27.8	27.9	27.9	9.0
1	12	1983	430	C6	9.9	9.9	9.9	27.3	27.5	27.5	8.6
30	11	1983	830	C7	10.3	9.4	8.9	27.8	27.5	27.4	8.6
30	11	1983	1230	C7	13.6	12.3	10.3	29.0	28.2	27.7	8.8
30	11	1983	1630	C7	14.1	14.2	10.9	29.8	29.4	28.1	9.3
30	11	1983	2030	C7	12.2	12.1	10.3	28.6	28.6	28.3	8.9
1	12	1983	30	C7	10.7	10.7	10.7	27.7	27.9	27.9	8.9
1	12	1983	430	C7	9.7	9.7	9.7	27.2	27.4	27.4	8.5
30	11	1983	830	C8	8.7	7.8	7.5	27.4	27.3	27.0	7.6
30	11	1983	1230	C8	11.8	8.7	8.1	28.2	27.7	27.4	8.9
30	11	1983	1630	C8	15.3	8.9	8.3	29.5	28.4	27.7	9.3
30	11	1983	2030	C8	11.7	8.3	7.4	28.1	28.2	27.8	9.0
1	2	1983	30	C8	9.6	9.6	9.5	27.4	27.5	27.5	8.7
1	12	1983	430	C8	8.8	8.8	8.8	26.9	27.0	27.0	8.3
30	11	1983	830	C9	6.5	6.2	5.8	27.5	27.4	27.3	7.5
30	11	1983	1230	C9	8.4	6.9	6.4	28.8	28.0	27.6	7.9
30	11	1983	1630	C9	10.3	8.2	6.6	29.2	28.8	28.0	8.3
30	11	1983	2030	C9	7.8	7.8	6.6	28.0	28.2	28.2	7.9
1	12	1983	30	C9	7.2	7.1	7.1	27.5	27.6	27.6	7.7
1	12	1983	430	C9	6.5	6.5	6.5	27.0	27.1	27.1	7.4
30	11	1983	830	D7	7.4	6.9	6.7	27.7	27.5	27.5	7.2
30	11	1983	1230	D7	8.5	7.9	7.8	28.7	28.4	28.1	7.7
30	11	1983	1630	D7	10.5	8.4	8.2	29.3	29.1	28.7	8.5
30	11	1983	2030	D7	8.2	8.2	8.1	28.3	28.5	28.5	7.7
1	12	1983	30	D7	7.6	7.5	7.1	27.5	27.6	27.6	7.4
1	12	1983	430	D7	6.9	6.8	6.8	27.1	27.2	27.2	7.1
30	11	1983	830	D6	9.5	8.5	8.2	27.5	27.3	27.1	7.3
30	11	1983	1230	D6	12.2	10.7	9.8	28.9	28.1	27.6	8.5
30	11	1983	1630	D6	14.3	12.3	10.4	29.3	28.8	28.2	9.0
30	11	1983	2030	D6	11.1	10.9	9.5	28.2	28.3	28.2	8.5
1	12	1983	30	D6	9.8	9.8	9.5	27.6	27.6	27.6	8.1
1	12	1983	430	D6	8.7	8.7	8.6	27.0	27.0	27.0	7.4
30	11	1983	830	D5	7.3	6.9	6.9	27.4	27.2	27.1	7.7
30	11	1983	1230	D5	9.0	8.4	8.4	28.6	27.8	27.7	7.9
30	11	1983	1630	D5	10.4	9.2	8.7	29.4	28.8	28.3	8.6
30	11	1983	2030	D5	8.6	8.5	8.4	28.0	28.3	28.3	7.7
1	12	1983	30	D5	7.9	7.9	7.5	27.4	27.6	27.5	7.5
1	12	1983	430	D5	7.1	7.0	7.0	26.8	27.0	26.9	7.1
27	12	1983	830	C1	5.6	5.5	5.3	27.9	27.8	27.8	7.6
27	12	1983	1230	C1	7.6	5.8	5.1	28.6	28.2	28.0	7.0
27	12	1983	1630	C1	9.5	6.9	5.2	29.0	28.7	28.3	7.9
27	12	1983	1930	C1	7.3	7.2	5.5	28.1	28.4	28.4	6.5
28	12	1983	430	C1	6.3	6.3	6.3	27.0	27.1	27.1	6.4
27	12	1983	830	C2	5.2	5.1	4.8	27.7	27.7	27.6	7.3
27	12	1983	1230	C2	6.9	5.4	5.0	29.0	28.2	27.9	6.7
27	12	1983	1630	C2	8.2	5.3	4.4	29.3	28.5	28.2	7.4
27	12	1983	1930	C2	6.9	5.7	4.4	28.4	28.5	28.4	6.7
28	12	1983	430	C2	5.8	5.8	5.8	26.9	27.0	27.1	6.4
27	12	1983	830	C3	5.3	4.8	4.6	27.3	27.2	27.0	7.2
27	12	1983	1230	C3	7.8	4.8	4.4	28.7	27.7	27.3	6.7
27	12	1983	1630	C3	8.8	4.1	3.8	28.9	27.8	27.7	7.0
27	12	1983	1930	C3	6.8	5.1	4.5	27.9	28.0	27.9	6.8
28	12	1983	430	C3	5.9	5.9	5.8	26.5	26.5	26.6	6.5
27	12	1983	830	C4	5.9	5.7	5.4	27.6	27.6	27.5	7.3
27	12	1983	1230	C4	7.8	6.0	5.7	28.8	28.0	27.8	6.7
27	12	1983	1630	C4	9.9	6.1	5.9	29.0	28.5	28.3	7.2
27	12	1983	1930	C4	7.8	7.7	7.7	28.2	28.3	28.4	7.3
28	12	1983	430	C4	6.6	6.5	6.6	26.7	26.8	26.9	6.7
27	12	1983	830	C5	6.2	5.9	5.7	27.6	27.6	27.5	7.3
27	12	1983	1230	C5	8.7	5.8	5.5	28.7	28.0	27.8	7.0
27	12	1983	1630	C5	11.4	6.5	5.1	29.0	28.7	28.2	7.5
27	12	1983	1930	C5	8.1	8.2	8.1	28.2	28.4	28.4	7.3
28	12	1983	430	C5	6.6	6.5	6.5	26.9	27.0	27.0	6.6
27	12	1983	830	C6	6.5	6.3	6.0	28.3	28.3	28.3	7.6
27	12	1983	1230	C6	8.0	6.8	6.0	29.3	28.9	28.5	7.3
27	12	1983	1630	C6	9.2	7.3	6.0	29.3	29.3	28.8	8.2
27	12	1983	1930	C6	7.7	7.7	7.6	28.6	28.8	28.8	8.1
28	12	1983	430	C6	6.1	6.2	6.2	27.5	27.6	27.6	6.8
27	12	1983	830	C7	5.8	5.5	5.3	27.9	27.9	27.8	7.3
27	12	1983	1230	C7	7.4	6.3	5.7	28.9	28.7	28.2	6.8
27	12	1983	1630	C7	8.3	6.5	5.7	29.0	29.1	28.5	7.2
27	12	1983	1930	C7	6.9	6.8	5.3	28.4	28.5	28.5	7.2
28	12	1983	430	C7	6.1	6.1	6.1	27.1	27.2	27.3	6.7
27	12	1983	830	C8	5.7	5.4	5.2	27.7	27.6	27.6	7.3
27	12	1983	1230	C8	7.9	5.8	5.3	29.0	28.2	27.9	7.1
27	12	1983	1630	C8	9.2	6.1	5.0	29.0	28.4	28.1	7.0
27	12	1983	1930	C8	7.5	6.7	5.4	28.2	28.3	28.3	7.1
28	12	1983	430	C8	6.3	6.2	6.2	26.8	27.0	27.0	6.5
27	12	1983	830	C9	5.7	5.5	5.4	27.3	27.3	27.1	7.3
27	12	1983	1230	C9	7.3	5.6	5.5	28.3	28.1	27.7	6.7
27	12	1983	1630	C9	8.0	6.2	5.5	28.5	28.7	28.4	7.0
27	12	1983	1930	C9	6.6	6.6	6.5	28.3	28.2	28.2	6.7
28	12	1983	430	C9	6.0	6.0	5.9	26.7	26.8	26.8	6.5
27	12	1983	830	D7	6.1	5.6	5.0	27.9	27.9	27.7	7.4
27	12	1983	1230	D7	8.7	5.5	5.0	29.1	28.1	28.0	6.7
27	12	1983	1630	D7	10.2	6.2	4.4	29.1	28.7	28.2	7.4
27	12	1983	1930	D7	7.5	7.0	5.3	28.2	28.3	28.4	6.8
28	12	1983	430	D7	6.2	6.1	6.2	27.0	27.1	27.1	6.5
27	12	1983	830	D6	5.1	4.7	4.5	27.7	27.5	27.4	7.2
27	12	1983	1230	D6	6.4	4.9	4.3	28.6	28.1	27.7	6.7

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DATE			TIME		OXYGEN			POND TEMP.			
DAY	MONTH	YEAR	OF DAY	POND	TOP	MID	BOT	TOP	MID	BOT	pH
					mg/l	mg/l	mg/l	deg C	deg C	deg C	
XX	XX	XXXX	XXXX		XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X
27	12	1983	1630	D6	7.8	4.6	4.0	28.8	28.6	27.9	7.0
27	12	1983	1930	D6	6.0	6.0	5.3	28.0	28.1	28.1	6.5
28	12	1983	430	D6	5.8	5.8	5.8	26.8	26.9	26.8	6.5
27	12	1983	830	D5	5.8	5.5	5.4	27.8	27.6	27.6	7.2
27	12	1983	1230	D5	6.4	5.4	5.2	28.9	28.2	27.9	6.8
27	12	1983	1630	D5	7.9	5.2	4.4	28.8	28.5	28.1	6.8
27	12	1983	1930	D5	5.9	6.0	5.5	28.2	28.3	28.3	6.5
28	12	1983	430	D5	5.9	5.8	5.8	26.8	26.9	27.0	6.4
25	1	1984	900	C1	6.2	6.0	5.8	27.1	27.1	27.1	7.3
25	1	1984	1230	C1	7.4	6.1	6.1	27.7	27.5	27.1	7.3
25	1	1984	1630	C1	8.2	6.0	5.9	27.3	27.1	27.1	8.0
25	1	1984	2030	C1	7.5	7.5	7.6	26.9	27.1	27.1	7.7
26	1	1984	30	C1	6.7	6.7	6.6	26.6	26.7	26.7	7.7
26	1	1984	430	C1	5.9	5.9	5.9	26.3	26.3	26.3	7.9
25	1	1984	900	C2	5.6	5.5	5.5	26.9	26.7	26.7	7.3
25	1	1984	1230	C2	6.5	5.9	5.7	27.1	27.0	26.8	7.3
25	1	1984	1630	C2	7.4	5.6	5.5	27.2	27.0	26.9	7.7
25	1	1984	2030	C2	6.9	6.4	6.3	26.9	26.9	26.9	7.7
26	1	1984	30	C2	6.1	6.1	6.1	26.5	26.5	26.5	7.6
26	1	1984	430	C2	5.4	5.4	5.4	26.0	26.0	26.0	7.8
25	1	1984	900	C3	5.5	5.5	5.4	27.1	27.0	26.9	7.4
25	1	1984	1230	C3	7.2	5.5	5.2	27.7	27.3	27.0	7.4
25	1	1984	1630	C3	8.6	5.0	5.0	27.5	27.4	27.1	7.7
25	1	1984	2030	C3	7.4	7.3	7.3	27.0	27.1	27.1	7.7
26	1	1984	30	C3	6.4	6.4	6.4	26.7	26.7	26.8	7.6
26	1	1984	430	C3	6.4	6.4	6.5	26.1	26.3	26.3	7.7
25	1	1984	900	C4	6.6	6.6	6.5	27.5	27.2	27.0	7.3
25	1	1984	1230	C4	7.9	7.0	6.9	27.7	27.4	27.2	8.0
25	1	1984	1630	C4	8.6	6.9	6.5	27.4	27.4	27.2	8.2
25	1	1984	2030	C4	7.9	7.8	7.7	27.1	27.2	27.2	7.8
26	1	1984	30	C4	7.0	7.0	6.9	26.7	26.7	26.8	7.7
26	1	1984	430	C4	6.8	6.8	6.8	26.2	26.3	26.3	7.8
25	1	1984	900	C5	6.1	6.1	6.0	26.8	26.5	26.4	7.3
25	1	1984	1230	C5	7.0	6.4	5.5	27.1	26.1	26.6	7.4
25	1	1984	1630	C5	8.5	6.3	5.9	27.0	26.9	26.7	7.8
25	1	1984	2030	C5	7.4	7.3	7.2	26.6	26.7	26.7	7.7
26	1	1984	30	C5	6.6	6.6	6.6	26.3	26.3	26.3	7.5
26	1	1984	430	C5	6.7	6.7	6.6	25.8	25.9	25.9	7.7
25	1	1984	900	C6	6.1	6.0	5.7	28.1	28.1	28.0	6.9
25	1	1984	1230	C6	7.2	6.6	6.1	28.4	28.3	28.1	7.9
25	1	1984	1630	C6	7.7	7.6	6.8	27.9	28.1	28.2	8.5
25	1	1984	2030	C6	7.5	7.4	7.4	27.8	27.9	27.9	8.0
26	1	1984	30	C6	6.6	6.5	6.5	27.4	27.5	27.5	7.8
26	1	1984	430	C6	6.7	6.7	6.6	26.8	27.1	27.0	7.8
25	1	1984	900	C7	7.0	6.7	6.6	28.2	28.0	27.8	6.7
25	1	1984	1230	C7	7.7	6.3	6.8	28.4	28.2	27.9	7.8
25	1	1984	1630	C7	8.7	8.6	6.5	28.0	28.1	27.9	8.4
25	1	1984	2030	C7	7.9	7.8	7.9	27.6	27.8	27.8	8.0
26	1	1984	30	C7	7.0	7.0	7.0	27.3	27.3	27.4	7.8

DATE			TIME		OXYGEN			POND TEMP.			
DAY	MONTH	YEAR	OF DAY	POND	TOP	MID	BOT	TOP	MID	BOT	pH
					mg/l	mg/l	mg/l	deg C	deg C	deg C	
XX	XX	XXXX	XXXX		XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X
26	1	1984	430	C7	7.1	7.1	7.1	26.8	26.9	26.9	8.9
25	1	1984	900	C8	6.6	6.3	6.3	27.8	27.8	27.7	7.1
25	1	1984	1230	C8	8.2	7.6	7.3	28.2	28.2	28.0	7.7
25	1	1984	1630	C8	9.2	8.2	7.8	27.8	27.8	27.7	8.3
25	1	1984	2030	C8	8.5	8.6	8.6	27.4	27.5	27.5	8.0
26	1	1984	30	C8	7.6	7.5	7.6	27.0	27.1	27.1	7.7
26	1	1984	430	C8	7.6	7.6	7.6	26.5	26.6	26.6	7.8
25	1	1984	900	C9	6.4	6.0	5.9	27.5	27.3	27.2	7.2
25	1	1984	1230	C9	7.9	6.4	6.3	27.9	27.6	27.2	7.6
25	1	1984	1630	C9	8.9	6.9	6.1	27.5	27.6	27.3	8.1
25	1	1984	2030	C9	7.3	7.3	7.3	27.6	27.5	27.3	7.9
26	1	1984	30	C9	7.5	7.4	7.4	26.7	26.9	26.9	7.6
26	1	1984	430	C9	6.8	6.9	6.8	26.3	26.5	26.5	7.8
25	1	1984	900	D7	6.0	5.6	5.4	27.8	27.5	27.3	7.2
25	1	1984	1230	D7	7.7	6.1	5.7	28.1	27.8	27.4	7.7
25	1	1984	1630	D7	8.4	6.7	6.6	27.6	27.6	27.5	8.1
25	1	1984	2030	D7	7.6	7.6	7.6	27.4	27.3	27.2	7.9
26	1	1984	30	D7	7.4	7.4	7.3	26.8	26.9	26.9	7.7
26	1	1984	430	D7	6.8	6.8	6.7	26.3	26.4	26.4	7.7
25	1	1984	900	D6	6.8	6.1	5.9	27.3	27.1	26.8	7.2
25	1	1984	1230	D6	8.1	6.7	6.1	27.5	27.3	27.0	7.6
25	1	1984	1630	D6	7.8	7.2	7.1	27.2	27.0	26.9	7.9
25	1	1984	2030	D6	6.8	6.8	6.7	26.5	26.4	26.3	7.8
26	1	1984	30	D6	7.5	7.5	7.3	26.3	26.3	26.3	7.5
26	1	1984	430	D6	6.9	6.9	6.7	25.8	25.8	25.7	7.7
25	1	1984	900	D5	6.1	6.2	6.1	27.2	27.2	27.2	7.3
25	1	1984	1230	D5	7.6	7.1	7.1	27.4	27.3	27.2	7.5
25	1	1984	1630	D5	8.7	7.5	7.2	27.3	27.2	27.1	7.8
25	1	1984	2030	D5	7.0	7.0	7.0	26.7	26.6	26.5	7.7
26	1	1984	30	D5	7.8	7.7	7.7	26.4	26.5	26.5	7.5
26	1	1984	430	D5	7.1	7.1	7.0	25.9	26.0	26.1	7.6
23	2	1984	1230	C1	7.3	7.0	5.6	28.5	26.9	26.0	7.3
23	2	1984	1630	C1	7.7	6.7	5.1	29.5	28.0	26.5	8.1
23	2	1984	2030	C1	8.0	6.8	5.0	28.5	28.0	27.0	7.3
24	2	1984	30	C1	6.4	5.5	4.2	27.3	27.3	27.3	6.5
24	2	1984	430	C1	5.5	5.1	4.0	26.5	26.8	26.9	6.3
24	2	1984	730	C1	5.6	5.4	4.9	25.6	26.0	26.0	5.7
23	2	1984	1230	C2	8.2	6.0	5.4	28.6	26.0	25.5	7.6
23	2	1984	1630	C2	9.6	5.1	4.5	29.8	27.5	26.5	7.9
23	2	1984	2030	C2	8.7	4.8	3.5	28.2	27.9	27.0	7.1
24	2	1984	30	C2	7.0	6.4	2.6	27.3	27.3	27.3	6.6
24	2	1984	430	C2	5.6	5.4	2.1	26.6	26.7	26.8	6.3
24	2	1984	730	C2	5.4	5.4	2.1	25.9	26.0	26.0	5.8
23	2	1984	1230	C3	6.0	5.6	4.3	26.8	25.5	24.9	7.6
23	2	1984	1630	C3	7.6	4.1	3.0	29.2	27.2	25.8	7.3
23	2	1984	2030	C3	5.8	3.2	2.2	28.0	26.8	26.1	6.7
24	2	1984	30	C3	5.2	4.8	2.2	27.0	27.0	27.0	6.4
24	2	1984	430	C3	4.4	4.2	3.6	26.0	26.0	26.0	6.2
24	2	1984	730	C3	4.1	3.6	2.1	25.4	25.4	25.3	5.8

Diurnal Measurements. Bogor, Indonesia, Cycle I, Wet Season

DATE			TIME		OXYGEN			POND TEMP.			
DAY	MONTH	YEAR	OF DAY	POND	TOP mg/l	MID mg/l	BOT mg/l	TOP deg C	MID deg C	BOT deg C	pH
XX	XX	XXXX	XXXX		XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X
23	2	1984	1230	C4	7.5	6.2	6.0	28.0	26.4	26.0	7.9
23	2	1984	1630	C4	8.9	6.6	5.3	30.0	28.0	27.0	7.8
23	2	1984	2030	C4	8.2	7.8	4.2	28.2	28.1	27.2	7.2
24	2	1984	30	C4	6.0	6.0	3.6	27.5	27.6	27.8	6.6
24	2	1984	430	C4	5.4	5.8	5.6	26.9	27.0	27.0	6.3
24	2	1984	730	C4	5.8	6.0	4.0	26.1	26.1	26.1	5.9
23	2	1984	1230	C5	7.5	6.3	4.8	28.0	26.5	25.0	7.9
23	2	1984	1630	C5	8.8	6.3	4.3	29.2	27.1	26.0	7.7
23	2	1984	2030	C5	8.3	6.1	3.4	28.1	27.2	26.6	7.2
24	2	1984	30	C5	6.5	6.0	4.4	27.0	27.1	27.0	6.6
24	2	1984	430	C5	5.6	5.2	5.3	26.3	26.4	26.3	6.3
24	2	1984	730	C5	5.8	5.4	5.4	25.9	25.9	25.9	5.9
23	2	1984	1230	C6	7.8	7.2	7.0	28.2	27.0	26.5	8.2
23	2	1984	1630	C6	8.0	7.8	6.6	29.6	28.9	27.6	7.8
23	2	1984	2030	C6	7.4	7.4	6.0	28.2	28.6	28.0	7.4
24	2	1984	30	C6	6.1	6.0	6.0	28.0	28.0	28.0	7.2
24	2	1984	430	C6	5.4	5.3	5.5	26.0	27.1	27.2	6.8
24	2	1984	730	C6	5.8	5.7	5.2	26.5	26.7	26.7	6.3
23	2	1984	1230	C7	7.0	6.1	5.0	27.9	27.1	26.0	8.1
23	2	1984	1630	C7	9.2	7.1	5.2	29.8	27.5	26.8	7.7
23	2	1984	2030	C7	8.2	7.0	5.2	28.8	28.2	27.1	7.4
24	2	1984	30	C7	7.1	6.6	3.9	28.0	28.0	27.5	7.2
24	2	1984	430	C7	5.5	5.4	5.2	27.0	27.0	27.0	6.7
24	2	1984	730	C7	6.0	5.7	5.6	26.3	26.3	26.3	6.4
23	2	1984	1230	C8	8.7	7.5	6.5	27.2	25.5	25.0	8.3
23	2	1984	1630	C8	9.0	8.8	6.5	29.0	27.1	26.2	7.7
23	2	1984	2030	C8	8.5	8.0	6.5	28.2	28.0	26.9	7.3
24	2	1984	30	C8	7.6	7.3	5.8	27.5	27.5	26.8	7.2
24	2	1984	430	C8	6.2	6.2	6.2	26.6	26.5	26.5	6.6
24	2	1984	730	C8	7.0	6.8	6.4	26.0	26.0	26.0	6.4
23	2	1984	1230	C9	7.3	6.6	5.3	27.5	26.0	25.5	8.1
23	2	1984	1630	C9	8.8	6.0	4.7	29.2	28.0	26.1	7.3
23	2	1984	2030	C9	7.0	6.3	4.4	28.2	29.0	27.0	7.0
24	2	1984	30	C9	6.4	5.3	4.4	27.3	27.2	27.0	6.8
24	2	1984	430	C9	5.2	5.0	5.1	26.4	26.5	26.4	6.4
24	2	1984	730	C9	5.3	5.1	5.0	25.9	26.0	26.0	6.3
23	2	1984	1230	D7	6.8	5.7	4.7	27.3	28.0	25.6	8.1
23	2	1984	1630	D7	7.9	5.4	4.1	29.2	28.1	26.5	7.4
23	2	1984	2030	D7	6.8	5.2	3.6	27.3	28.0	27.2	7.0
24	2	1984	30	D7	5.4	5.6	5.0	27.2	27.5	27.2	6.7
24	2	1984	430	D7	4.3	4.1	4.0	26.8	26.8	26.8	6.4
24	2	1984	730	D7	4.8	4.4	4.2	26.1	26.1	26.1	6.2
23	2	1984	1230	D6	6.2	4.8	3.7	26.0	24.9	24.2	7.0
23	2	1984	1630	D6	6.3	4.2	3.0	28.5	26.3	25.0	7.1
23	2	1984	2030	D6	4.6	3.5	1.4	27.4	26.5	26.0	6.9
24	2	1984	30	D6	4.6	3.6	3.0	26.4	26.2	26.0	6.5
24	2	1984	430	D6	3.6	3.6	3.2	25.8	25.7	25.6	6.2
24	2	1984	730	D6	4.0	4.0	3.4	25.1	25.0	25.0	6.2
23	2	1984	1230	D5	6.6	5.0	4.3	27.2	26.0	25.1	7.8
23	2	1984	1630	D5	7.2	4.8	3.6	29.2	27.4	26.2	7.0
23	2	1984	2030	D5	5.8	4.4	3.5	28.2	27.8	27.2	7.0
24	2	1984	30	D5	5.4	5.2	4.4	27.1	27.5	27.5	6.5
24	2	1984	430	D5	4.4	4.0	3.4	26.2	26.5	26.6	6.2
24	2	1984	730	D5	4.5	4.7	4.1	25.8	25.6	25.5	6.1
20	3	1984	830	C1	4.2	3.8	3.3	27.8	27.4	27.2	7.3
20	3	1984	1230	C1	5.9	4.7	3.9	29.0	28.4	27.5	7.5
20	3	1984	1630	C1	10.2	5.6	4.0	32.0	29.1	28.0	8.1
20	3	1984	2030	C1	8.3	6.0	4.2	31.0	30.1	28.5	8.0
21	3	1984	30	C1	7.4	5.4	4.0	29.2	29.2	29.0	7.6
21	3	1984	430	C1	5.6	5.1	5.5	28.2	28.5	28.5	7.1
20	3	1984	830	C2	4.8	4.7	4.0	27.0	26.8	26.2	7.3
20	3	1984	1230	C2	6.4	4.2	4.2	29.2	26.9	26.5	7.2
20	3	1984	1630	C2	9.7	4.7	2.9	32.5	28.2	27.8	7.7
20	3	1984	2030	C2	7.2	4.5	4.0	30.5	29.1	28.0	7.5
21	3	1984	30	C2	6.0	5.5	4.5	28.9	28.9	28.9	7.4
21	3	1984	430	C2	4.8	2.5	1.3	28.0	28.0	28.0	7.1
20	3	1984	830	C3	5.3	4.1	3.8	27.4	27.0	26.5	7.4
20	3	1984	1230	C3	6.2	4.3	3.6	29.9	27.6	26.9	7.4
20	3	1984	1630	C3	8.0	4.5	3.7	32.0	29.5	28.0	8.1
20	3	1984	2030	C3	7.8	4.9	4.2	30.5	30.1	28.0	7.6
21	3	1984	30	C3	5.1	5.3	5.2	29.1	29.1	29.1	7.3
21	3	1984	430	C3	4.8	4.8	4.2	28.0	28.1	28.1	7.1
20	3	1984	830	C4	5.2	4.3	4.2	28.5	28.2	28.0	7.6
20	3	1984	1230	C4	6.3	5.3	5.3	30.0	29.0	28.5	7.7
20	3	1984	1630	C4	10.0	8.4	6.2	32.0	31.6	29.8	8.7
20	3	1984	2030	C4	8.6	8.0	5.3	31.3	31.0	30.0	8.6
21	3	1984	30	C4	7.2	7.0	6.6	30.1	30.0	30.0	8.1
21	3	1984	430	C4	6.2	6.0	5.6	29.0	29.1	29.1	7.5
20	3	1984	830	C5	5.4	4.8	4.3	28.2	27.8	27.0	7.5
20	3	1984	1230	C5	5.9	5.0	3.6	30.0	28.8	28.0	7.7
20	3	1984	1630	C5	9.0	6.7	4.8	32.6	30.2	28.9	8.5
20	3	1984	2030	C5	8.1	5.8	4.0	31.0	30.7	29.1	8.3
21	3	1984	30	C5	6.4	5.8	5.6	29.9	29.9	29.8	7.7
21	3	1984	430	C5	5.5	5.2	5.4	28.7	28.9	28.9	7.4
20	3	1984	830	C6	6.1	5.2	5.1	28.8	28.2	28.2	7.9
20	3	1984	1230	C6	6.8	6.3	5.3	29.9	29.1	28.6	8.5
20	3	1984	1630	C6	9.0	7.6	5.0	32.4	31.2	29.8	8.8
20	3	1984	2030	C6	7.3	7.2	5.2	31.4	31.0	30.0	8.8
21	3	1984	30	C6	7.0	6.5	4.4	30.1	30.2	30.0	8.3
21	3	1984	430	C6	5.8	5.3	6.4	29.2	29.5	29.5	7.9
20	3	1984	830	C7	4.3	3.8	4.1	29.0	28.6	28.2	7.7
20	3	1984	1230	C7	4.0	4.0	3.7	30.1	29.2	28.9	7.8
20	3	1984	1630	C7	6.6	5.2	4.6	32.3	31.0	30.1	8.2
20	3	1984	2030	C7	6.3	5.6	4.4	31.5	31.2	30.5	8.0
21	3	1984	30	C7	5.4	4.9	4.8	30.0	30.1	30.0	7.8
21	3	1984	430	C7	4.7	4.5	4.2	29.6	29.8	29.7	7.6
20	3	1984	830	C8	6.3	6.2	5.4	28.8	28.6	28.2	7.8
20	3	1984	1230	C8	7.5	6.4	5.4	30.4	29.0	28.5	8.7

TABLE 4

Diurnal Measurements. Bogor, Indonesia, Cycle I, Wet Season

DATE			TIME OF	POND	OXYGEN			POND TEMP.			pH
					TOP	MID	BOT	TOP	MID	BOT	
DAY	MONTH	YEAR	DAY		mg/l	mg/l	mg/l	deg C	deg C	deg C	
XX	XX	XXXX	XXXX		XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X
20	3	1984	1630	C8	12.0	9.2	6.8	33.9	31.2	29.8	9.0
20	3	1984	2030	C8	10.0	9.0	7.2	31.9	31.4	30.0	9.0
21	3	1984	30	C8	8.3	8.4	6.1	30.1	30.2	30.0	8.7
21	3	1984	430	C8	7.0	7.2	6.6	29.2	29.3	29.3	8.4
20	3	1984	830	C9	4.9	4.3	4.0	28.2	27.8	27.2	7.6
20	3	1984	1230	C9	5.4	5.2	4.2	29.5	27.9	27.2	8.0
20	3	1984	1630	C9	10.0	5.9	3.7	31.8	29.8	28.2	8.7
20	3	1984	2030	C9	8.6	6.5	3.7	30.9	30.4	28.0	8.5
21	3	1984	30	C9	7.0	6.9	4.6	29.5	29.5	29.2	8.0
21	3	1984	430	C9	5.4	5.6	5.2	28.7	328.7	28.7	7.7
20	3	1984	830	D7	6.0	5.4	4.9	28.3	28.0	28.0	7.7
20	3	1984	1230	D7	6.9	6.3	4.9	28.3	28.2	27.9	8.1
20	3	1984	1630	D7	10.4	8.2	5.5	32.9	31.0	29.2	8.9
20	3	1984	2030	D7	8.4	7.2	6.2	31.3	31.2	30.0	8.7
21	3	1984	30	D7	7.3	6.4	6.2	30.0	30.0	30.0	8.2
21	3	1984	430	D7	6.2	6.1	6.0	29.1	29.2	29.2	7.7
20	3	1984	830	D6	4.8	4.7	3.6	27.5	27.0	26.8	7.5
20	3	1984	1230	D6	5.5	5.2	4.2	29.5	27.0	26.9	7.6
20	3	1984	1630	D6	7.6	6.0	3.7	31.9	29.1	28.1	8.2
20	3	1984	2030	D6	6.5	5.2	4.3	30.4	30.0	29.0	8.1
21	3	1984	30	D6	5.1	5.2	4.5	29.3	29.3	29.3	7.7
21	3	1984	430	D6	4.6	4.6	4.2	28.5	28.5	28.5	7.4
20	3	1984	830	D5	5.8	5.4	4.8	28.2	27.8	27.1	7.5
20	3	1984	1230	D5	6.0	5.2	3.8	28.5	27.5	26.5	7.6
20	3	1984	1630	D5	8.7	5.7	3.6	32.5	31.0	28.6	8.0
20	3	1984	2030	D5	7.5	6.7	3.9	30.8	30.8	29.1	7.9
21	3	1984	30	D5	6.2	6.6	3.2	29.8	29.8	29.0	8.1
21	3	1984	430	D5	5.8	5.8	4.2	28.7	29.0	28.8	7.4

TABLE 4

Diurnal Measurements. Bogor, Indonesia, Cycle I, Dry Season

DATE			TIME		OXYGEN			POND TEMP.			
DAY	MONTH	YEAR	OF DAY	POND	TOP mg/l	MID mg/l	BOT mg/l	TOP deg C	MID deg C	BOT deg C	pH
XX	XX	XXXX	XXXX		XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X
13	6	1984	430	C2	5.3	5.3	5.3	27.1	27.2	27.2	6.8
13	6	1984	430	C3	5.3	5.3	5.3	26.9	27.1	27.1	7.0
13	6	1984	430	C4	5.6	5.7	5.5	26.4	26.9	26.2	7.0
13	6	1984	430	C5	5.8	5.8	5.7	26.5	26.6	26.5	7.1
13	6	1984	430	C6	5.2	5.2	5.2	26.9	26.9	26.8	7.1
13	6	1984	430	C7	5.1	5.1	5.0	26.6	26.7	26.5	8.0
13	6	1984	430	C8	5.5	5.9	5.7	26.3	26.3	26.0	8.3
13	6	1984	430	C9	6.8	6.8	6.8	28.0	28.1	28.1	9.5
13	6	1984	430	D5	6.8	6.8	6.8	27.9	28.0	28.0	9.5
13	6	1984	430	D6	5.5	5.5	5.5	27.3	27.4	27.4	9.0
13	6	1984	430	D7	5.3	5.3	5.3	27.5	27.5	27.5	8.8
13	6	1984	830	C2	5.3	5.4	5.3	26.8	26.8	26.8	7.8
13	6	1984	830	C3	5.2	5.3	5.3	26.8	26.8	26.8	8.0
13	6	1984	830	C4	5.8	6.0	5.8	26.2	26.0	26.0	7.8
13	6	1984	830	C5	6.0	5.8	5.9	26.3	26.3	26.2	7.7
13	6	1984	830	C6	5.2	5.3	5.3	26.6	26.4	26.3	7.9
13	6	1984	830	C7	5.0	5.2	5.1	26.5	26.3	26.1	7.9
13	6	1984	830	C8	6.6	6.2	6.1	26.1	25.8	25.6	7.9
13	6	1984	830	C9	7.1	7.0	7.0	27.8	27.8	27.8	9.9
13	6	1984	830	D5	7.2	7.2	7.2	27.8	27.8	27.8	9.8
13	6	1984	830	D6	5.7	5.8	5.6	27.2	27.2	27.0	9.2
13	6	1984	830	D7	5.5	5.5	5.5	27.3	27.2	27.2	9.2
13	6	1984	1230	C2	8.4	7.1	5.9	28.6	27.4	27.2	7.9
13	6	1984	1230	C3	7.5	8.0	6.6	28.5	27.4	27.2	8.0
13	6	1984	1230	C4	9.3	7.6	6.8	27.7	26.8	26.8	8.0
13	6	1984	1230	C5	10.1	7.8	7.0	28.5	26.8	26.8	7.9
13	6	1984	1230	C6	7.4	8.0	5.9	28.8	27.2	26.7	7.9
13	6	1984	1230	C7	6.3	6.3	5.4	28.4	27.2	26.5	7.9
13	6	1984	1230	C8	10.3	8.1	6.4	28.7	27.0	26.5	8.0
13	6	1984	1230	C9	8.1	7.9	8.6	29.7	29.4	29.2	9.3
13	6	1984	1230	D5	7.3	7.3	7.0	30.3	30.1	30.0	9.7
13	6	1984	1230	D6	6.9	6.6	6.3	29.4	28.2	27.8	9.1
13	6	1984	1230	D7	6.7	6.4	6.4	29.5	27.9	27.7	9.1
13	6	1984	1630	C2	9.1	6.6	4.9	29.6	27.7	27.4	8.0
13	6	1984	1630	C3	6.8	5.4	5.0	29.9	27.9	27.7	8.0
13	6	1984	1630	C4	9.7	7.3	6.2	29.5	27.4	27.1	8.3
13	6	1984	1630	C5	10.1	7.1	6.2	29.3	27.0	26.8	8.5
13	6	1984	1630	C6	7.4	6.9	4.4	30.2	27.1	26.9	8.1
13	6	1984	1630	C7	6.0	5.7	3.9	30.3	28.7	27.7	8.0
13	6	1984	1630	C8	10.4	7.0	5.4	30.4	27.4	26.5	9.0
13	6	1984	1630	C9	8.5	8.4	8.7	31.1	29.8	29.6	9.5
13	6	1984	1630	D5	9.6	10.2	10.2	31.3	31.3	31.1	9.8
13	6	1984	1630	D6	7.4	7.1	6.2	30.5	29.2	28.3	9.1
13	6	1984	1630	D7	8.2	6.0	5.8	30.8	28.1	28.0	9.2
13	6	1984	2030	C2	7.8	4.8	3.6	30.0	28.0	27.6	8.3
13	6	1984	2030	C3	7.0	5.4	4.0	30.0	28.4	27.8	8.4
13	6	1984	2030	C4	9.3	6.9	4.3	29.7	27.6	27.2	8.6
13	6	1984	2030	C5	9.3	6.4	5.1	29.6	27.6	26.8	8.6
13	6	1984	2030	C6	7.3	6.6	3.8	29.8	29.1	27.2	8.5
13	6	1984	2030	C7	6.0	5.1	4.9	29.5	29.0	27.6	8.3
13	6	1984	2030	C8	11.6	6.4	4.8	29.5	28.0	26.7	9.1
13	6	1984	2030	C9	7.8	7.1	8.0	30.0	30.0	29.7	9.6
13	6	1984	2030	D5	9.1	9.1	9.0	30.5	30.6	30.6	9.7
13	6	1984	2030	D6	6.6	6.6	5.6	29.7	29.7	28.5	9.1
13	6	1984	2030	D7	8.7	5.8	5.6	30.2	28.4	28.1	9.4
11	7	1984	430	C2	5.8	5.8	5.8	28.5	28.6	28.6	6.7
11	7	1984	430	C3	5.0	5.0	5.0	28.5	28.5	28.5	7.0
11	7	1984	430	C4	6.7	6.7	6.6	28.8	28.9	28.9	7.2
11	7	1984	430	C5	6.5	6.4	6.4	28.4	28.5	28.5	7.1
11	7	1984	430	C6	8.3	8.3	8.1	28.7	28.7	28.7	8.4
11	7	1984	430	C7	7.2	7.1	7.0	28.7	28.7	28.7	7.5
11	7	1984	430	C8	5.9	5.9	5.0	28.6	28.6	28.6	7.3
11	7	1984	430	C9	11.5	11.5	11.0	28.4	28.5	28.5	9.3
11	7	1984	430	D5	6.4	6.4	6.4	28.4	28.4	28.4	8.9
11	7	1984	430	D6	12.8	12.7	12.8	28.6	28.7	28.7	9.5
11	7	1984	430	D7	10.4	10.3	10.4	28.8	28.8	28.8	9.5
11	7	1984	830	C2	5.3	5.1	5.0	27.8	27.8	28.0	7.5
11	7	1984	830	C3	4.8	4.6	4.2	28.1	28.1	28.1	7.4
11	7	1984	830	C4	6.7	6.3	6.0	28.1	28.1	28.0	7.5
11	7	1984	830	C5	6.7	6.4	6.1	28.0	28.0	28.0	7.5
11	7	1984	830	C6	8.3	7.8	7.4	28.2	28.2	28.2	8.6
11	7	1984	830	C7	7.1	6.8	6.6	28.2	28.2	28.2	8.1
11	7	1984	830	C8	6.2	5.9	5.7	28.3	28.3	28.3	7.7
11	7	1984	830	C9	11.3	11.3	11.2	28.0	28.0	28.0	9.5
11	7	1984	830	D5	6.5	6.4	6.2	28.0	28.0	28.0	9.2
11	7	1984	830	D6	13.0	12.7	12.5	28.4	28.4	28.3	9.6
11	7	1984	830	D7	10.7	10.6	10.5	28.3	28.3	28.4	9.6
11	7	1984	1230	C2	8.3	6.6	4.8	30.3	29.4	28.7	8.6
11	7	1984	1230	C3	7.4	5.6	4.8	30.4	29.5	29.0	8.4
11	7	1984	1230	C4	9.0	7.7	6.6	30.1	29.5	28.0	8.7
11	7	1984	1230	C5	9.4	7.6	5.5	30.1	28.8	28.3	8.8
11	7	1984	1230	C6	10.5	8.8	7.1	30.8	29.5	28.9	9.4
11	7	1984	1230	C7	9.9	8.1	7.3	30.5	29.6	29.0	9.2
11	7	1984	1230	C8	8.6	6.5	5.9	30.9	29.6	28.9	8.8
11	7	1984	1230	C9	11.2	13.2	11.9	30.0	29.0	28.4	10.0
11	7	1984	1230	D5	7.9	8.9	6.6	30.2	29.0	28.6	9.5
11	7	1984	1230	D6	16.2	14.9	14.8	30.6	29.4	29.1	10.1
11	7	1984	1230	D7	13.9	12.8	12.4	30.6	29.6	29.1	10.0
11	7	1984	1630	C2	8.4	6.9	6.2	30.7	30.0	29.6	8.8
11	7	1984	1630	C3	7.9	5.2	4.0	30.9	30.1	29.2	8.6
11	7	1984	1630	C4	10.5	8.1	7.1	31.2	30.2	29.3	9.2
11	7	1984	1630	C5	10.9	7.2	4.9	31.4	29.4	28.8	9.3
11	7	1984	1630	C6	11.6	8.9	7.8	31.1	29.8	29.2	9.6
11	7	1984	1630	C7	10.1	8.1	7.9	31.4	29.7	29.2	9.4
11	7	1984	1630	C8	11.3	7.2	5.6	31.6	30.2	29.3	9.2
11	7	1984	1630	C9	15.9	13.2	12.1	31.1	29.1	28.6	10.2
11	7	1984	1630	D5	7.8	6.5	6.5	30.2	29.3	28.9	9.6
11	7	1984	1630	D6	15.4	15.0	14.8	31.4	30.1	29.5	10.2

TABLE 4

Diurnal Measurements. Bogor, Indonesia, Cycle I, Dry Season

DATE			TIME		OXYGEN			POND TEMP.			
DAY	MONTH	YEAR	OF DAY	POND	TOP mg/l	MID mg/l	BOT mg/l	TOP deg C	MID deg C	BOT deg C	pH
XX	XX	XXXX	XXXX		XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X
11	7	1984	1630	D7	13.6	13.0	12.6	31.1	29.9	29.5	10.1
11	7	1984	2030	C2	6.9	6.9	6.9	29.2	29.3	29.3	8.1
11	7	1984	2030	C3	5.8	5.8	5.0	29.3	29.3	29.3	7.9
11	7	1984	2030	C4	8.1	8.1	8.0	29.3	29.3	29.3	8.3
11	7	1984	2030	C5	8.1	7.9	5.9	29.1	29.2	29.0	8.4
11	7	1984	2030	C6	8.6	8.8	8.5	29.4	29.4	29.4	9.1
11	7	1984	2030	C7	8.6	8.6	8.5	29.2	29.3	29.4	9.0
11	7	1984	2030	C8	7.7	7.7	7.7	29.3	29.3	29.3	8.6
11	7	1984	2030	C9	12.1	12.2	12.1	29.0	29.0	28.9	10.0
11	7	1984	2030	D5	6.7	6.7	6.5	28.9	29.0	29.0	9.5
11	7	1984	2030	D6	12.8	12.8	12.8	29.4	29.4	29.4	10.0
11	7	1984	2030	D7	10.8	10.9	10.9	29.4	29.5	29.5	9.9
8	8	1984	430	C2	6.4	6.4	6.2	28.3	28.4	28.4	7.4
8	8	1984	430	C3	5.7	5.7	5.7	28.2	28.2	28.2	7.2
8	8	1984	430	C4	9.0	9.0	8.1	27.4	27.5	27.5	8.3
8	8	1984	430	C5	7.2	7.2	7.2	27.5	27.5	27.5	8.1
8	8	1984	430	C6	7.9	7.9	5.3	27.8	28.0	28.0	8.3
8	8	1984	430	C7	7.2	7.2	7.2	27.9	27.9	27.9	7.9
8	8	1984	430	C8	8.1	8.0	8.0	27.5	27.6	27.6	8.0
8	8	1984	430	C9	12.5	12.4	12.4	27.8	27.8	27.8	10.0
8	8	1984	430	D5	9.3	9.3	9.2	28.1	28.3	28.3	9.6
8	8	1984	430	D6	11.4	11.4	11.4	27.8	27.8	27.8	10.0
8	8	1984	430	D7	11.0	11.0	11.0	28.6	28.6	28.6	10.1
8	8	1984	830	C2	6.1	5.9	5.8	27.7	27.8	27.8	7.9
8	8	1984	830	C3	5.3	5.0	5.0	27.6	27.6	27.6	7.8
8	8	1984	830	C4	8.8	8.6	8.3	27.0	27.0	27.0	8.9
8	8	1984	830	C5	6.7	6.4	6.3	26.9	27.0	27.0	8.6
8	8	1984	830	C6	7.0	6.9	6.5	27.5	27.5	27.5	8.5
8	8	1984	830	C7	7.1	6.9	6.6	27.4	27.5	27.5	8.2
8	8	1984	830	C8	8.2	7.4	7.2	27.1	27.1	27.0	8.3
8	8	1984	830	C9	12.1	12.1	12.0	27.3	27.3	27.3	10.1
8	8	1984	830	D5	9.0	9.0	8.8	27.8	27.7	27.7	9.7
8	8	1984	830	D6	10.7	10.4	10.4	27.4	27.3	27.2	10.0
8	8	1984	830	D7	10.9	10.8	10.7	28.0	28.0	28.0	10.2
8	8	1984	1230	C2	7.9	6.2	6.1	30.1	29.0	28.5	7.9
8	8	1984	1230	C3	6.5	5.3	4.7	30.0	28.3	28.1	7.8
8	8	1984	1230	C4	11.6	9.3	8.5	29.2	27.6	27.3	9.0
8	8	1984	1230	C5	9.2	7.0	5.1	28.2	27.8	27.4	8.9
8	8	1984	1230	C6	9.4	8.0	6.2	29.5	28.4	27.8	8.8
8	8	1984	1230	C7	8.6	8.0	6.8	29.8	29.0	28.2	8.5
8	8	1984	1230	C8	10.7	9.6	7.3	29.6	28.2	27.3	8.8
8	8	1984	1230	C9	15.1	14.2	13.1	29.5	28.8	27.8	10.0
8	8	1984	1230	D5	13.1	10.8	9.3	29.9	28.7	28.2	9.8
8	8	1984	1230	D6	13.5	12.3	11.5	29.5	28.3	27.8	9.9
8	8	1984	1230	D7	13.3	12.8	12.6	30.4	29.1	28.8	10.0
8	8	1984	1630	C2	9.6	8.0	7.1	31.7	30.5	29.1	8.7
8	8	1984	1630	C3	8.7	6.0	5.6	31.5	29.8	28.6	8.5
8	8	1984	1630	C4	17.8	10.7	8.3	31.6	28.4	27.6	9.7
8	8	1984	1630	C5	11.5	8.3	4.9	30.6	28.6	27.7	9.4

Diurnal Measurements. Bogor, Indonesia, Cycle I, Dry Season

DATE			TIME		OXYGEN			POND TEMP.			
DAY	MONTH	YEAR	OF DAY	POND	TOP	MID	BOT	TOP	MID	BOT	pH
XX	XX	XXXX	XXXX		mg/l	mg/l	mg/l	deg C	deg C	deg C	XX.X
					XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	
8	8	1984	1630	C6	13.2	11.2	6.8	31.8	29.5	28.5	9.5
8	8	1984	1630	C7	12.6	9.7	7.8	31.1	29.4	28.5	9.4
8	8	1984	1630	C8	15.1	11.1	7.3	31.6	29.7	27.9	9.7
8	8	1984	1630	C9	16.7	16.1	14.9	30.9	29.0	28.3	10.4
8	8	1984	1630	D5	16.8	14.2	11.4	31.2	29.5	28.7	10.3
8	8	1984	1630	D6	16.0	15.3	12.5	31.2	28.7	28.1	10.3
8	8	1984	1630	D7	15.2	15.8	15.5	31.6	30.3	29.3	10.5
8	8	1984	2030	C2	8.6	7.4	6.3	30.1	30.3	29.6	9.2
8	8	1984	2030	C3	7.9	6.2	4.3	30.2	29.9	28.7	8.9
8	8	1984	2030	C4	14.2	13.2	8.7	29.9	29.6	28.1	9.9
8	8	1984	2030	C5	9.1	7.4	4.6	29.8	29.1	27.9	9.7
8	8	1984	2030	C6	11.4	9.3	6.4	29.8	30.0	28.3	9.7
8	8	1984	2030	C7	10.0	10.0	7.3	29.9	30.0	28.7	9.7
8	8	1984	2030	C8	11.9	10.1	7.1	29.7	29.2	28.0	9.8
8	8	1984	2030	C9	13.3	15.2	12.9	29.8	29.0	28.1	10.6
8	8	1984	2030	D5	13.3	12.0	9.2	30.0	29.6	28.9	10.4
8	8	1984	2030	D6	12.6	13.5	11.2	29.8	29.5	28.2	10.5
8	8	1984	2030	D7	12.4	14.2	12.3	30.3	30.2	29.7	10.6
4	9	1984	430	C2	5.8	5.7	5.7	27.8	27.8	27.8	7.4
4	9	1984	430	C3	4.8	4.7	4.7	27.4	27.4	27.4	7.3
4	9	1984	430	C4	5.8	5.9	5.9	27.3	27.4	27.4	7.3
4	9	1984	430	C5	5.9	5.9	5.8	27.4	27.4	27.4	7.5
4	9	1984	430	C6	5.2	5.2	5.1	27.4	27.5	27.5	7.4
4	9	1984	430	C7	6.0	6.1	6.1	27.7	27.7	27.7	7.5
4	9	1984	430	C8	5.8	5.8	5.8	27.4	27.4	27.4	7.5
4	9	1984	430	C9	6.1	6.1	6.0	27.6	27.7	27.7	8.7
4	9	1984	430	D5	6.6	6.6	6.6	27.1	27.1	27.1	9.8
4	9	1984	430	D6	8.0	8.0	7.9	27.6	27.7	27.7	9.6
4	9	1984	430	D7	7.1	7.1	7.1	27.8	27.8	27.8	9.0
4	9	1984	830	C2	5.7	5.6	5.5	27.5	27.6	27.6	8.1
4	9	1984	830	C3	4.8	4.6	4.3	27.1	27.2	27.1	8.1
4	9	1984	830	C4	5.9	5.8	5.6	27.0	27.1	27.0	8.2
4	9	1984	830	C5	5.8	5.5	5.3	27.1	27.1	27.1	8.3
4	9	1984	830	C6	5.4	5.2	5.0	27.2	27.3	27.3	8.2
4	9	1984	830	C7	6.2	6.1	5.9	27.5	27.5	27.5	8.4
4	9	1984	830	C8	6.0	5.9	5.8	27.2	27.2	27.2	8.6
4	9	1984	830	C9	6.4	6.2	6.1	27.4	27.5	27.5	9.2
4	9	1984	830	D5	6.6	6.4	6.0	26.9	26.8	26.8	8.7
4	9	1984	830	D6	8.0	7.7	7.6	27.3	27.4	27.4	9.5
4	9	1984	830	D7	6.9	6.9	6.9	27.5	27.5	27.5	9.7
4	9	1984	1230	C2	7.2	5.7	4.9	29.4	28.2	28.0	8.7
4	9	1984	1230	C3	7.0	4.8	4.0	28.6	27.6	27.4	8.8
4	9	1984	1230	C4	7.8	6.6	5.5	29.0	27.8	27.4	8.7
4	9	1984	1230	C5	8.0	6.4	4.4	30.5	27.7	27.3	9.0
4	9	1984	1230	C6	7.2	5.1	4.4	29.4	27.6	27.5	8.6
4	9	1984	1230	C7	8.3	6.3	5.5	29.7	28.2	28.1	8.6
4	9	1984	1230	C8	7.9	6.4	5.6	29.3	27.7	27.6	8.5
4	9	1984	1230	C9	8.7	7.9	6.2	29.4	28.2	27.9	9.2
4	9	1984	1230	D5	9.8	7.4	6.1	28.3	27.4	27.2	8.8
4	9	1984	1230	D6	10.8	9.6	7.5	29.3	27.1	27.3	9.3
4	9	1984	1230	D7	10.2	9.1	8.0	29.7	28.4	28.0	9.5
4	9	1984	1630	C2	7.5	7.4	5.5	29.2	29.2	28.8	7.6
4	9	1984	1630	C3	7.8	6.9	4.3	29.0	29.1	27.9	7.6
4	9	1984	1630	C4	8.3	8.2	6.0	28.9	28.9	28.1	7.7
4	9	1984	1630	C5	8.1	8.1	5.1	28.8	28.9	28.4	8.4
4	9	1984	1630	C6	7.8	7.7	4.5	28.8	28.9	28.5	8.2
4	9	1984	1630	C7	8.0	8.0	7.8	28.9	29.0	29.0	8.1
4	9	1984	1630	C8	7.9	7.8	7.5	28.7	28.8	28.8	8.0
4	9	1984	1630	C9	8.3	8.2	7.0	28.8	28.3	28.6	9.0
4	9	1984	1630	D5	8.6	7.7	6.2	28.3	28.2	27.6	9.5
4	9	1984	1630	D6	9.6	8.6	8.5	28.5	28.6	28.2	9.8
4	9	1984	1630	D7	9.0	8.9	9.1	28.9	28.9	28.9	9.6
4	9	1984	2030	C2	6.5	6.5	6.5	28.0	28.1	28.1	7.4
4	9	1984	2030	C3	6.2	6.2	6.2	27.7	27.7	27.7	7.3
4	9	1984	2030	C4	7.0	7.0	6.9	27.6	27.6	27.6	7.4
4	9	1984	2030	C5	6.8	6.8	6.8	27.6	27.6	27.6	8.0
4	9	1984	2030	C6	6.4	6.3	6.3	27.7	27.7	27.7	7.9
4	9	1984	2030	C7	6.9	6.8	6.8	27.9	28.0	28.0	8.0
4	9	1984	2030	C8	6.9	6.8	6.8	27.7	27.7	27.8	7.9
4	9	1984	2030	C9	7.1	7.0	7.0	27.8	27.9	27.9	8.9
4	9	1984	2030	D5	6.9	6.9	6.9	27.4	27.5	27.5	9.3
4	9	1984	2030	D6	7.8	7.8	7.8	27.7	27.9	27.9	9.7
4	9	1984	2030	D7	7.5	7.5	7.5	28.1	28.1	28.1	9.5
3	10	1984	430	C2	4.6	4.5	4.5	28.6	28.7	28.7	6.9
3	10	1984	430	C3	5.4	5.4	5.1	28.4	28.5	28.4	6.9
3	10	1984	430	C4	5.3	5.3	5.3	28.0	28.0	28.0	7.0
3	10	1984	430	C5	5.5	5.4	5.4	28.0	28.0	28.0	7.2
3	10	1984	430	C6	4.7	4.7	4.7	27.9	27.9	27.9	7.2
3	10	1984	430	C7	5.0	5.0	5.0	28.2	28.1	28.1	7.2
3	10	1984	430	C8	5.5	5.5	5.5	28.2	28.2	28.2	7.2
3	10	1984	430	C9	9.2	9.2	9.0	28.4	28.4	28.4	9.4
3	10	1984	430	D5	6.4	6.2	6.1	27.6	27.6	27.5	8.8
3	10	1984	430	D6	9.0	9.0	8.9	28.4	28.5	28.5	9.3
3	10	1984	430	D7	6.3	6.4	6.4	28.2	28.2	28.2	9.0
3	10	1984	830	C2	5.1	5.0	4.8	28.5	28.5	28.5	7.2
3	10	1984	830	C3	5.5	5.1	5.1	28.3	28.3	28.1	7.3
3	10	1984	830	C4	5.4	5.2	5.1	28.0	27.9	27.8	7.4
3	10	1984	830	C5	5.8	5.4	4.9	28.0	27.9	27.9	7.5
3	10	1984	830	C6	5.3	4.7	4.2	27.8	27.8	27.6	7.4
3	10	1984	830	C7	5.3	5.1	4.9	28.1	28.1	28.0	7.3
3	10	1984	830	C8	5.7	5.3	5.3	28.2	28.1	28.0	7.3
3	10	1984	830	C9	9.4	9.1	8.6	28.4	28.3	28.3	9.5
3	10	1984	830	D5	6.1	5.8	5.6	27.5	27.2	27.1	8.6
3	10	1984	830	D6	9.4	9.1	8.2	28.5	28.3	28.2	9.4
3	10	1984	830	D7	7.2	6.1	5.8	28.2	28.1	27.9	9.0
3	10	1984	1230	C2	8.5	6.1	4.6	30.3	29.2	28.8	7.7
3	10	1984	1230	C3	8.6	6.4	4.9	30.1	28.9	28.4	7.8
3	10	1984	1230	C4	8.1	6.2	4.8	30.6	28.6	28.2	8.1

TABLE 4

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DATE			TIME OF DAY	POND	OXYGEN TOP mg/l	OXYGEN MID mg/l	OXYGEN BOT mg/l	POND TEMP. TOP deg C	POND TEMP. MID deg C	POND TEMP. BOT deg C	pH
DAY	MONTH	YEAR									
XX	XX	XXXX	XXXX		XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X
3	10	1984	1230	C5	9.3	6.8	4.8	30.0	28.9	28.2	8.4
3	10	1984	1230	C6	6.8	6.1	4.8	29.5	28.5	27.9	7.9
3	10	1984	1230	C7	8.0	5.7	4.7	30.4	28.8	28.3	7.7
3	10	1984	1230	C8	8.0	7.4	5.6	29.8	29.0	28.6	7.7
3	10	1984	1230	C9	13.2	11.0	10.2	30.6	29.3	28.8	9.3
3	10	1984	1230	D5	7.6	5.9	4.8	29.8	28.0	27.4	8.9
3	10	1984	1230	D6	14.8	12.3	9.7	30.8	29.3	28.6	9.7
3	10	1984	1230	D7	14.4	8.2	5.9	30.3	29.1	28.2	9.5
3	10	1984	1630	C2	10.9	6.4	4.6	31.8	30.0	29.1	8.5
3	10	1984	1630	C3	10.9	7.4	5.2	32.2	29.4	28.8	8.6
3	10	1984	1630	C4	11.0	8.1	5.5	31.4	29.2	28.5	8.8
3	10	1984	1630	C5	11.0	8.5	5.3	31.4	29.2	28.5	8.9
3	10	1984	1630	C6	9.6	7.4	4.1	30.5	29.2	27.9	8.8
3	10	1984	1630	C7	10.7	7.3	5.9	31.6	29.1	28.7	8.9
3	10	1984	1630	C8	11.1	8.7	7.0	31.7	29.7	29.2	8.9
3	10	1984	1630	C9	15.1	12.7	11.3	32.2	29.5	29.2	9.8
3	10	1984	1630	D5	11.3	8.1	6.0	31.2	28.2	27.7	9.3
3	10	1984	1630	D6	15.8	15.2	11.9	32.4	29.8	28.9	9.9
3	10	1984	1630	D7	10.3	12.4	7.2	31.6	29.1	28.6	9.7
3	10	1984	2030	C2	10.4	5.9	2.7	30.7	30.4	29.3	7.5
3	10	1984	2030	C3	9.6	6.7	4.8	30.4	30.0	29.0	7.0
3	10	1984	2030	C4	9.1	7.7	4.7	30.3	30.1	29.2	7.2
3	10	1984	2030	C5	9.2	7.6	4.3	30.5	29.5	28.7	7.5
3	10	1984	2030	C6	9.0	6.8	4.4	30.1	29.5	28.3	7.5
3	10	1984	2030	C7	9.4	8.3	4.8	30.4	30.1	29.0	7.5
3	10	1984	2030	C8	9.5	8.4	6.6	30.4	30.1	29.1	7.3
3	10	1984	2030	C9	12.6	10.5	9.4	30.6	30.0	29.1	8.7
3	10	1984	2030	D5	8.2	6.3	4.4	29.6	28.5	27.9	7.9
3	10	1984	2030	D6	10.6	11.6	8.0	30.6	30.1	29.3	8.9
3	10	1984	2030	D7	14.7	9.4	6.2	30.4	29.5	28.7	8.7
31	10	1984	430	C2	5.4	4.5	4.5	28.1	28.1	28.1	6.9
31	10	1984	430	C3	5.0	4.9	4.9	28.0	28.0	28.0	6.9
31	10	1984	430	C4	5.8	5.7	5.7	27.7	27.7	27.7	7.1
31	10	1984	430	C5	4.9	4.8	4.8	27.5	27.6	27.6	7.1
31	10	1984	430	C6	5.5	5.5	5.5	27.8	27.9	27.9	8.0
31	10	1984	430	C7	5.9	5.9	5.9	27.7	27.7	27.7	8.1
31	10	1984	430	C8	5.8	5.7	5.7	27.9	27.9	27.9	7.8
31	10	1984	430	C9	6.8	6.8	6.8	28.4	28.5	28.5	8.8
31	10	1984	430	D5	4.6	4.6	4.6	28.5	28.5	28.6	8.3
31	10	1984	430	D6	5.1	5.1	5.1	28.5	28.6	28.6	8.5
31	10	1984	430	D7	6.0	6.0	6.0	28.5	28.6	28.6	8.9
31	10	1984	830	C2	4.2	4.0	3.9	27.8	27.8	27.8	6.7
31	10	1984	830	C3	4.6	4.6	4.5	27.7	27.8	27.8	6.8
31	10	1984	830	C4	5.9	5.5	5.4	27.5	27.5	27.5	7.0
31	10	1984	830	C5	4.9	4.7	4.5	27.4	27.4	27.3	7.1
31	10	1984	830	C6	5.8	5.4	5.1	27.7	27.7	27.6	7.3
31	10	1984	830	C7	6.5	5.6	5.3	27.5	27.5	27.3	7.3
31	10	1984	830	C8	6.0	5.8	5.1	27.7	27.7	27.4	7.2
31	10	1984	830	C9	7.1	6.8	6.5	28.2	28.3	28.2	8.6
31	10	1984	830	D5	5.2	4.5	4.4	28.3	28.2	28.2	8.1
31	10	1984	830	D6	5.3	5.0	4.8	28.3	28.4	28.4	8.7
31	10	1984	830	D7	6.3	5.7	5.6	28.3	28.3	28.3	8.9
31	10	1984	1230	C2	6.3	5.0	3.9	29.4	28.5	28.3	7.0
31	10	1984	1230	C3	6.4	5.6	4.3	29.2	28.4	28.1	7.5
31	10	1984	1230	C4	8.3	6.1	4.6	28.8	28.0	27.6	8.0
31	10	1984	1230	C5	8.0	5.1	3.8	28.7	28.2	27.5	8.0
31	10	1984	1230	C6	9.0	5.9	4.6	29.7	28.5	27.7	8.2
31	10	1984	1230	C7	9.5	8.3	5.0	28.9	28.2	27.5	8.2
31	10	1984	1230	C8	8.1	7.0	5.6	29.4	28.1	27.8	7.9
31	10	1984	1230	C9	10.2	9.0	8.5	30.4	28.9	28.8	9.2
31	10	1984	1230	D5	9.3	7.5	6.8	29.8	29.4	28.9	8.9
31	10	1984	1230	D6	7.6	7.1	6.4	30.3	29.2	29.1	9.2
31	10	1984	1230	D7	9.8	8.2	7.5	29.8	29.0	28.8	9.4
31	10	1984	1630	C2	7.3	5.0	4.9	30.2	28.8	28.6	7.5
31	10	1984	1630	C3	8.6	6.0	4.6	30.6	28.6	28.5	7.7
31	10	1984	1630	C4	12.3	6.8	4.6	30.8	28.3	28.0	8.5
31	10	1984	1630	C5	10.4	5.2	3.2	30.0	28.5	28.2	8.5
31	10	1984	1630	C6	11.4	6.9	4.5	30.1	28.5	28.0	8.9
31	10	1984	1630	C7	11.1	7.5	5.6	29.9	28.4	27.4	8.8
31	10	1984	1630	C8	9.5	7.4	5.2	28.7	28.5	28.0	8.5
31	10	1984	1630	C9	11.3	10.6	9.5	30.7	29.8	29.2	9.5
31	10	1984	1630	D5	11.3	10.3	8.5	30.9	29.8	29.6	9.2
31	10	1984	1630	D6	8.7	8.2	7.1	30.7	29.8	29.7	9.4
31	10	1984	1630	D7	11.2	9.3	8.4	30.8	29.5	29.4	9.6
31	10	1984	2030	C2	8.7	4.7	3.2	29.7	29.2	28.8	7.3
31	10	1984	2030	C3	7.8	6.1	4.6	29.6	29.5	28.7	7.7
31	10	1984	2030	C4	11.1	6.5	3.8	29.7	29.2	27.9	8.4
31	10	1984	2030	C5	9.9	5.8	2.4	29.5	28.5	27.8	8.4
31	10	1984	2030	C6	10.9	6.6	5.5	29.5	29.0	28.1	8.8
31	10	1984	2030	C7	10.3	7.1	4.6	29.4	28.0	27.6	8.8
31	10	1984	2030	C8	8.6	6.8	4.9	29.5	28.9	28.2	8.4
31	10	1984	2030	C9	10.4	10.2	7.9	29.8	29.8	29.6	9.6
31	10	1984	2030	D5	10.0	9.6	7.5	29.9	30.0	29.8	9.0
31	10	1984	2030	D6	7.8	7.7	4.5	29.8	29.9	29.8	9.1
31	10	1984	2030	D7	10.0	9.9	7.3	29.9	29.9	29.5	8.2

TABLE 5

Fish/Shrimp Stocking, Sampling and Harvest. Bogor, Indonesia, Cycle I, Wet Season

DATE			POND	ACTIVITY	SPECIES	WHOLE POPULATION		SAMPLE WEIGHT (g)			SAMPLE LENGTH (cm)		
DAY	MONTH	YEAR		CODE	CODE	WT.(kg)	No.	MEAN	No.	S. DEV	MEAN	No.	S. DEV
XX	XX	XXXX				XXXX.X		XXX		XXX.X	XX.X		XX.XX
31	10	1983	C1	STK	nil	10.5	200	52	20		15.0	20	
31	10	1983	C2	STK	nil	10.0	200	51	20		14.9	20	
31	10	1983	C3	STK	nil	11.4	200	56	20		15.7	20	
31	10	1983	C4	STK	nil	11.6	200	59	20		15.8	20	
31	10	1983	C5	STK	nil	11.7	200	54	20		15.3	20	
31	10	1983	C6	STK	nil	11.6	200	57	20		15.5	20	
31	10	1983	C7	STK	nil	11.0	200	55	20		15.4	20	
31	10	1983	C8	STK	nil	11.5	200	54	20		15.2	20	
31	10	1983	C9	STK	nil	11.0	200	57	20		15.6	20	
31	10	1983	D5	STK	nil	11.0	200	55	20		15.4	20	
31	10	1983	D6	STK	nil	11.0	200	53	20		15.3	20	
31	10	1983	D7	STK	nil	12.0	200	59	20		15.8	20	
1	12	1983	C1	SAM	nil			75	20				
1	12	1983	C2	SAM	nil			75	20				
1	12	1983	C3	SAM	nil			70	20				
1	12	1983	C4	SAM	nil			75	20				
1	12	1983	C5	SAM	nil			65	20				
1	12	1983	C6	SAM	nil			80	20				
1	12	1983	C7	SAM	nil			70	20				
1	12	1983	C8	SAM	nil			80	20				
1	12	1983	C9	SAM	nil			75	20				
1	12	1983	D5	SAM	nil			75	20				
1	12	1983	D6	SAM	nil			75	20				
1	12	1983	D7	SAM	nil			75	20				
27	12	1983	C1	SAM	nil			75	20				
27	12	1983	C2	SAM	nil			85	20				
27	12	1983	C3	SAM	nil			75	20				
27	12	1983	C4	SAM	nil			65	20				
27	12	1983	C5	SAM	nil			85	20				
27	12	1983	C6	SAM	nil			85	20				
27	12	1983	C7	SAM	nil			65	20				
27	12	1983	C8	SAM	nil			70	20				
27	12	1983	C9	SAM	nil			65	20				
27	12	1983	D5	SAM	nil			70	20				
27	12	1983	D6	SAM	nil			65	20				
27	12	1983	D7	SAM	nil			65	20				
25	1	1984	C1	SAM	nil			70	20				
25	1	1984	C2	SAM	nil			70	20				
25	1	1984	C3	SAM	nil			75	20				
25	1	1984	C4	SAM	nil			75	20				
25	1	1984	C5	SAM	nil			90	20				
25	1	1984	C6	SAM	nil			80	20				
25	1	1984	C7	SAM	nil			70	20				
25	1	1984	C8	SAM	nil			75	20				
25	1	1984	C9	SAM	nil			75	20				
25	1	1984	D5	SAM	nil			75	20				
25	1	1984	D6	SAM	nil			70	20				
25	1	1984	D7	SAM	nil			75	20				
23	2	1984	C1	SAM	nil			80	20				
23	2	1984	C2	SAM	nil			75	20				
23	2	1984	C3	SAM	nil			75	20				
23	2	1984	C4	SAM	nil			60	20				
23	2	1984	C5	SAM	nil			65	20				
23	2	1984	C6	SAM	nil			90	20				
23	2	1984	C7	SAM	nil			70	20				
23	2	1984	C8	SAM	nil			65	20				
23	2	1984	C9	SAM	nil			70	20				
23	2	1984	D5	SAM	nil			70	20				
23	2	1984	D6	SAM	nil			60	20				
23	2	1984	D7	SAM	nil			60	20				
20	3	1984	C1	HAR	nil	8.8	158	55	20		15.7	20	
20	3	1984	C2	HAR	nil	10.3	193	66	20		16.6	20	
20	3	1984	C3	HAR	nil	12.4	180	77	20		17.1	20	
20	3	1984	C4	HAR	nil	10.4	172	62	20		16.0	20	
20	3	1984	C5	HAR	nil	13.0	182	77	20		17.1	20	
20	3	1984	C6	HAR	nil	12.7	184	76	20		17.0	20	
20	3	1984	C7	HAR	nil	12.0	177	64	20		16.2	20	
20	3	1984	C8	HAR	nil	10.2	139	97	20		16.5	20	
20	3	1984	C9	HAR	nil	11.7	186	67	20		16.0	20	
20	3	1984	D5	HAR	nil	10.1	184	54	20		15.5	20	
20	3	1984	D6	HAR	nil	11.0	194	51	20		15.1	20	
20	3	1984	D7	HAR	nil	12.2	182	62	20		16.2	20	

TABLE 5

Fish/Shrimp Stocking, Sampling and Harvest. Bogor, Indonesia, Cycle I, Dry Season

DATE			POND	ACTIVITY CODE	SPECIES CODE	WHOLE POPULATION		SAMPLE WEIGHT (g)			SAMPLE LENGTH (cm)			REPRODUCTION	
DAY XX	MONTH XX	YEAR XXXX				WT.(kg) XXXX.X	No.	MEAN XXX	No.	S. DEV XXX.X	MEAN XX.X	No.	S. DEV XX.XX	WT.(kg) XXX.X	No.
19	6	1984	C2	STK	nil	13.5	200	67	20		12.0	20			
19	6	1984	C3	STK	nil	11.5	200	61	20		11.4	20			
19	6	1984	C4	STK	nil	11.5	200	64	20		11.8	20			
19	6	1984	C5	STK	nil	11.5	200	57	20		11.0	20			
19	6	1984	C6	STK	nil	12.5	200	67	20		11.9	20			
19	6	1984	C7	STK	nil	12.5	200	62	20		11.3	20			
19	6	1984	C8	STK	nil	12.5	200	59	20		11.3	20			
19	6	1984	C9	STK	nil	12.0	200	58	20		11.4	20			
19	6	1984	D5	STK	nil	10.5	200	47	20		11.3	20			
19	6	1984	D6	STK	nil	11.5	200	68	20		12.0	20			
19	6	1984	D7	STK	nil	11.5	200	59	20		11.3	20			
11	7	1984	C2	SAM	nil			65	20						
11	7	1984	C3	SAM	nil			65	20						
11	7	1984	C4	SAM	nil			75	20						
11	7	1984	C5	SAM	nil			65	20						
11	7	1984	C6	SAM	nil			60	20						
11	7	1984	C7	SAM	nil			80	20						
11	7	1984	C8	SAM	nil			60	20						
11	7	1984	C9	SAM	nil			70	20						
11	7	1984	D5	SAM	nil			55	20						
11	7	1984	D6	SAM	nil			60	20						
11	7	1984	D7	SAM	nil			65	20						
8	8	1984	C2	SAM	nil			75	20						
8	8	1984	C3	SAM	nil			85	20						
8	8	1984	C4	SAM	nil			70	20						
8	8	1984	C5	SAM	nil			70	20						
8	8	1984	C6	SAM	nil			75	20						
8	8	1984	C7	SAM	nil			80	20						
8	8	1984	C8	SAM	nil			70	20						
8	8	1984	C9	SAM	nil			70	20						
8	8	1984	D5	SAM	nil			60	20						
8	8	1984	D6	SAM	nil			70	20						
8	8	1984	D7	SAM	nil			65	20						
4	9	1984	C2	SAM	nil			75	20						
4	9	1984	C3	SAM	nil			85	20						
4	9	1984	C4	SAM	nil			70	20						
4	9	1984	C5	SAM	nil			70	20						
4	9	1984	C6	SAM	nil			80	20						
4	9	1984	C7	SAM	nil			70	20						
4	9	1984	C8	SAM	nil			75	20						
4	9	1984	C9	SAM	nil			80	20						
4	9	1984	D5	SAM	nil			65	20						
4	9	1984	D6	SAM	nil			65	20						
4	9	1984	D7	SAM	nil			75	20						
3	10	1984	C2	SAM	nil			75	20						
3	10	1984	C3	SAM	nil			105	20						
3	10	1984	C4	SAM	nil			75	20						
3	10	1984	C5	SAM	nil			75	20						
3	10	1984	C6	SAM	nil			75	20						
3	10	1984	C7	SAM	nil			65	20						
3	10	1984	C8	SAM	nil			65	20						
3	10	1984	C9	SAM	nil			70	20						
3	10	1984	D5	SAM	nil			60	20						
3	10	1984	D6	SAM	nil			65	20						
3	10	1984	D7	SAM	nil			65	20						
12	11	1984	C2	SAM	nil	14.3	196	71	20		12.4	20			
12	11	1984	C3	SAM	nil	12.7	190	70	20		12.5	20			
12	11	1984	C4	SAM	nil	12.5	179	77	20		12.6	20			
12	11	1984	C5	SAM	nil	12.1	178	71	20		12.6	20			
12	11	1984	C6	SAM	nil	14.4	181	80	20		12.9	20			
12	11	1984	C7	SAM	nil	12.4	197	72	20		12.7	20			
12	11	1984	C8	SAM	nil	11.5	190	66	20		12.6	20			
12	11	1984	C9	SAM	nil	11.7	199	71	20		13.0	20			
12	11	1984	D5	SAM	nil	8.1	166	46	20		10.7	20			
12	11	1984	D6	SAM	nil	10.9	180	61	20		12.0	20			
12	11	1984	D7	SAM	nil	12.5	200	68	20		12.7	20			

TABLE 6

Water Quality Measurements at Start and End of Each Experiment. Bogor, Indonesia, Cycle I, Wet Season

DATE			POND	ALKA.	T.HARD	pH	AMMONIA	NO2-N	NO3-N	TOTAL NO2&3-N	TOTAL P	ORTHO PO4-P	Cl-	SALT	SO4	B	Ca	Cu	Fe	Mg	K	Na	Zn
DAY	MONTH	YEAR		mg/l CaCO3	mg/l CaCO3		N mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ppt	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
XX	XX	XXXX		XXX	XXX	XX.X	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	XXXXX	XX	XXX.X	X.XXX	XXX.X	X.XXX	X.XXX	XXXX	XXXX	XXXXX	X.XXX
30	10	1983	C1										5		9.7	<1.0	2.7	0.030	5.500	2	3	7	0.100
30	10	1983	C2										4		7.5	<1.0	5.9	<0.02	4.700	2	2	5	0.050
30	10	1983	C3										5		8.8	<1.0	1.1	<0.02	14.200	2	3	6	0.070
30	10	1983	C4										5		8.0	<1.0	1.3	<0.02	7.300	3	3	4	0.120
30	10	1983	C5										4		15.5	<1.0	0.7	<0.02	8.250	2	2	5	0.030
30	10	1983	C6										4		10.6	<1.0	3.7	<0.02	3.250	2	2	6	0.040
30	10	1983	C7										4		8.4	<1.0	3.1	<0.02	3.250	2	2	5	0.040
30	10	1983	C8										5		8.4	<1.0	2.1	<0.02	4.850	2	2	5	0.060
30	10	1983	C9										4		8.0	<1.0	0.7	<0.02	7.750	2	1	4	0.100
30	10	1983	D5										5		6.7	<1.0	0.7	<0.02	8.950	2	1	5	0.030
30	10	1983	D6										5		6.2	<1.0	0.6	<0.02	8.850	2	1	4	0.050
30	10	1983	D7										4		9.5	<1.0	0.8	<0.02	13.400	2	1	4	0.050

Water Quality Measurements at Start and End of Each Experiment. Bogor, Indonesia, Cycle I, Dry Season

DATE			POND	ALKA.	T.HARD	pH	AMMONIA	NO2-N	NO3-N	TOTAL NO2&3-N	TOTAL P	ORTHO PO4-P	Cl-	SALT	SO4	B	Ca	Cu	Fe	Mg	K	Na	Zn
DAY	MONTH	YEAR		mg/l CaCO3	mg/l CaCO3		N mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ppt	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
XX	XX	XXXX		XXX	XXX	XX.X	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	XXXXX	XX	XXX.X	X.XXX	XXX.X	X.XXX	X.XXX	XXXX	XXXX	XXXXX	X.XXX
11	6	1984	C2	21	20	7.8				0.15	0.17	0.10											
11	6	1984	C3	32	28	8.0				0.18	0.20	0.13											
11	6	1984	C4	27	19	7.8				0.83	0.16	0.11											
11	6	1984	C5	22	19	7.7				0.14	0.15	0.11											
11	6	1984	C6	32	28	7.9				1.28	0.18	0.12											
11	6	1984	C7	26	23	7.9				0.12	0.15	0.10											
11	6	1984	C8	21	18	7.9				1.02	0.15	0.14											
11	6	1984	C9	60	59	9.9				0.05	0.19	0.13											
11	6	1984	D5	56	55	9.8				0.02	0.08	0.08											
11	6	1984	D6	53	50	9.2				<0.01	0.13	0.12											
11	6	1984	D7	50	48	9.2				0.02	0.13	0.11											
14	6	1984	C2										4		9.3	0.490	1.4	<0.01	2.100	2	2	6	<0.01
14	6	1984	C3										4		4.3	0.550	1.4	0.030	4.800	2	1	5	<0.01
14	6	1984	C4										4		9.3	0.830	1.5	<0.01	4.800	2	2	6	0.020
14	6	1984	C5										3		5.0	0.430	1.4	0.030	1.700	2	1	5	<0.01
14	6	1984	C6										3		4.6	0.810	1.4	0.030	5.000	2	1	6	<0.01
14	6	1984	C7										3		6.7	0.550	1.7	0.030	3.100	2	2	6	<0.01
14	6	1984	C8										4		6.5	0.610	1.3	<0.01	2.100	2	1	5	<0.01
14	6	1984	C9										3		5.9	0.610	4.9	0.030	0.900	1	2	5	<0.01
14	6	1984	D5										3		5.7	0.550	5.7	0.030	0.900	1	2	5	<0.01
14	6	1984	D6										3		4.9	0.470	3.0	0.030	1.900	1	2	5	<0.01
14	6	1984	D7										3		9.5	0.670	1.2	<0.01	1.100	1	2	5	<0.01
11	11	1984	C2										4		4.4	0.730	1.0	<0.01	1.100	1	1	5	<0.01
11	11	1984	C3										3		4.7	0.950	1.6	<0.01	2.100	1	1	4	<0.01
11	11	1984	C4										3		5.2	0.650	1.5	<0.01	4.000	2	2	5	<0.01
11	11	1984	C5										3		4.8	0.750	1.4	<0.01	1.600	1	1	5	<0.01
11	11	1984	C6										4		4.9	0.570	1.8	<0.01	3.000	2	2	5	<0.01
11	11	1984	C7										3		4.7	0.490	0.7	<0.01	1.700	1	1	5	<0.01
11	11	1984	C8										3		4.2	0.750	1.0	<0.01	1.000	4	2	6	<0.01
11	11	1984	C9										4		3.6	0.610	3.8	<0.01	2.100	1	2	4	0.110
11	11	1984	D5										3		3.9	0.610	3.8	<0.01	0.700	2	2	5	<0.01
11	11	1984	D6										3		3.6	0.570	3.0	<0.01	0.800	2	2	5	<0.01
11	11	1984	D7																				

Pond Soil Measurements. Bogor, Indonesia, Cycle I, Wet Season

SAMPLE DATE			POND	CLAY	SILT	SAND	ORG. MAT.	pH (WET)	P	Ca meq/	Mg meq/	K	Na meq/	TOTAL N	NH4-N	NO3-N	C.E.C meq/	SOLUBLE SALTS	Al	Fe	Zn	Mn	Cu	SO4-S	LIME REQ	FREE CaCO3	EXCH-H meq/	EXCH-NA meq/
DAY	MONTH	YEAR		%	%	%	%		ppm	100g	100g	ppm	100g	%	ppm	ppm	100g	mmhos/cm	ppm	ppm	ppm	ppm	ppm	ppm	(SMP)	meq/l	100g	100g
XX	XX	XXXX		XX.X	XX.X	XX.X	XX.X	XX.X	XXXXX	XXX.X	XXX.X	XXXXX	XXX.X	XX.XX	XXXX.X	XXXXX.X	XXXX	XX.X	XXXXX	XXXXX	XXXXX	XXXXX	XXXXX	XXXXX	X.X	XXX.X	XXX.X	XXX.X
29	9	1983	C1	61.7	29.3	9.0	3.7	5.8	6	7.3	2.5	257				1.2					6	119	6		6.5	<0.2		
29	9	1983	C2	61.9	26.8	11.3	3.1	6.1	4	7.5	2.4	187				0.8					5	99	6		6.7	0.2		
29	9	1983	C3	57.9	28.7	13.4	3.0	6.2	4	8.3	2.5	191				2.1					5	120	6		6.8	<0.2		
29	9	1983	C4	62.4	27.7	9.9	2.9	6.0	4	8.3	2.2	203				11.9					4	130	5		6.8	<0.2		
29	9	1983	C5	58.3	31.8	9.9	3.1	6.0	7	8.8	2.5	226				18.6					4	144	5		2.5	<0.2		
29	9	1983	C6	58.9	29.3	11.8	3.0	5.8	4	8.2	2.5	207				20.1					4	99	5		6.5	<0.2		
29	9	1983	C7	52.0	32.0	16.0	2.8	5.5	4	7.5	2.5	222				31.6					3	156	4		6.5	<0.2		
29	9	1983	C8	50.4	27.9	21.7	2.5	6.1	4	8.2	2.3	254				8.5					4	144	5		6.7	0.3		
29	9	1983	C9	64.0	29.6	6.4	0.8	6.2	2	7.4	2.2	250				2.1					3	184	4		6.7	<0.2		
29	9	1983	D5	66.3	24.9	8.8	2.3	6.2	2	7.0	3.1	190				7.6					1	148	4		6.6	<0.2		
29	9	1983	D6	63.5	26.4	10.1	2.6	6.2	1	8.1	2.3	211				1.2					3	192	4		6.5	<0.2		
29	9	1983	D7	70.7	20.4	8.9	2.1	6.3	1	7.6	2.4	250				4.4					2	180	3		6.5	<0.2		

TABLE 7

Pond Soil Measurements. Bogor, Indonesia, Cycle I, Dry Season

SAMPLE DATE			POND	CLAY	SILT	SAND	ORG. MAT.	pH (WET)	P	Ca meq/	Mg meq/	K	Na meq/	TOTAL N	NH4-N	NO3-N	C.E.C meq/	SOLUBLE SALTS	Al	Fe	Zn	Mn	Cu	SO4-S	LIME REQ	FREE CaCO3	EXCH-H meq/	EXCH-NA meq/
DAY	MONTH	YEAR		%	%	%	%		ppm	100g	100g	ppm	100g	%	ppm	ppm	100g	mmhos/cm	ppm	ppm	ppm	ppm	ppm	ppm	(SMP)	meq/l	100g	100g
XX	XX	XXXX		XX.X	XX.X	XX.X	XX.X	XX.X	XXXXX	XXX.X	XXX.X	XXXX	XXX.X	XX.XX	XXXXX.X	XXXXX.X	XXXX	XX.X	XXXXX	XXXXX	XXXXX	XXXXX	XXXXX	XXXXX	X.X	XXX.X	XXX.X	XXX.X
15	5	1984	C2	48.1	50.9	1.0	4.7	6.6	4	11.7		373				0.6					8	182	5		0.5	11.1		
15	5	1984	C3	63.3	29.4	7.3	2.8	6.6	4	11.5		254	-			2.0					5	166	4		0.3	12.6		
15	5	1984	C4	68.5	23.9	7.6	2.6	6.6	3	11.1		265				1.1					3	111	2		0.1	8.4		
15	5	1984	C5	67.4	24.5	8.1	2.3	6.8	4	11.2		242				2.6					4	110	3		0.2	10.5		
15	5	1984	C6	68.7	25.5	5.8	3.1	6.7	7	12.2		269				1.1					5	149	4		0.2	11.4		
15	5	1984	C7	64.8	28.2	7.0	2.3	7.3	8	16.0		285				11.7					6	148	4		0.4	12.6		
15	5	1984	C8	65.8	29.0	5.2	2.4	6.9	10	13.8		285				2.9					6	160	2		0.3	10.2		
15	5	1984	C9	56.3	26.4	17.3	1.4	7.0	4	9.7		304				5.3					2	148	2		0.3	10.8		
15	5	1984	D5	66.0	27.2	6.8	2.2	7.0	3	12.8		222				2.4					3	106	2		0.3	10.2		
15	5	1984	D6	67.2	25.6	7.2	2.1	6.9	3	12.4		273				3.0					4	154	3		0.3	12.6		
15	5	1984	D7	69.9	23.3	6.8	1.9	6.5	2	9.4		285				2.9					4	148	2		0.2	12.0		

Pond Morphometrics. Bogor, Indonesia, Cycle I

DATE			POND	DEPTH = 10cm		DEPTH = 20cm		DEPTH = 30cm		DEPTH = 40cm		DEPTH = 50cm		DEPTH = 60cm		DEPTH = 70cm		DEPTH = 80cm		DEPTH = 90cm		DEPTH = 100cm	
				AREA	VOLUME	AREA	VOLUME	AREA	VOLUME	AREA	VOLUME	AREA	VOLUME	AREA	VOLUME	AREA	VOLUME	AREA	VOLUME	AREA	VOLUME	AREA	VOLUME
DAY	MONTH	YEAR		m2	m3	m2	m3	m2	m3	m2	m3	m2	m3	m2	m3	m2	m3	m2	m3	m2	m3	m2	m3
XX	XX	XXXX		XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX
15	10	1983	C1	200	20	200	40	200	60	200	80	200	100	200	120	200	140	200	160	200	180	200	200
15	10	1983	C2	200	20	200	40	200	60	200	80	200	100	200	120	200	140	200	160	200	180	200	200
15	10	1983	C3	200	20	200	40	200	60	200	80	200	100	200	120	200	140	200	160	200	180	200	200
15	10	1983	C4	200	20	200	40	200	60	200	80	200	100	200	120	200	140	200	160	200	180	200	200
15	10	1983	C5	200	20	200	40	200	60	200	80	200	100	200	120	200	140	200	160	200	180	200	200
15	10	1983	C6	200	20	200	40	200	60	200	80	200	100	200	120	200	140	200	160	200	180	200	200
15	10	1983	C7	200	20	200	40	200	60	200	80	200	100	200	120	200	140	200	160	200	180	200	200
15	10	1983	C8	200	20	200	40	200	60	200	80	200	100	200	120	200	140	200	160	200	180	200	200
15	10	1983	C9	200	20	200	40	200	60	200	80	200	100	200	120	200	140	200	160	200	180	200	200
15	10	1983	D5	200	20	200	40	200	60	200	80	200	100	200	120	200	140	200	160	200	180	200	200
15	10	1983	D6	200	20	200	40	200	60	200	80	200	100	200	120	200	140	200	160	200	180	200	200
15	10	1983	D7	200	20	200	40	200	60	200	80	200	100	200	120	200	140	200	160	200	180	200	200

TABLE 9

Analysis of Nutrients and Lime. Bogor, Indonesia, Cycle I, Wet Season

SAMPLE DATE			TYPE OF NUTRIENT OR LIME	DRY MATTER	COMPOSITION AS % DRY MATTER					LIME NEUT. VALUE
DAY	MONTH	YEAR		%	N	P	K	ORGANIC C	S	%
XX	XX	XXXX		XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XXX.X
24	10	1983	TSP			43.6				

Analysis of Nutrients and Lime. Bogor, Indonesia, Cycle I, Dry Season

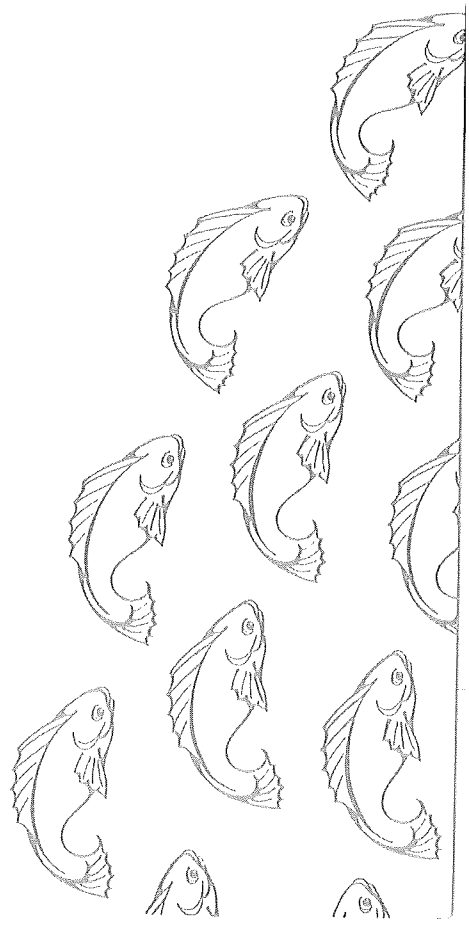
SAMPLE DATE			TYPE OF NUTRIENT OR LIME	DRY MATTER	COMPOSITION AS % DRY MATTER					LIME NEUT. VALUE
DAY	MONTH	YEAR		%	N	P	K	ORGANIC C	S	%
XX	XX	XXXX		XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XXX.X
12	6	1984	TSP			43.6				

TABLE 10

Nutrient and Lime Inputs. Bogor, Indonesia, Cycle I, Dry Season

DATE			POND	FEED		MANURE		INORGANIC		LIME	
DAY	MONTH	YEAR		TYPE	kg/ha	TYPE	kg/ha	TYPE	kg/ha	TYPE	kg/ha
XX	XX	XXXX			XXX		XXX		XXX		XXX
23	5	1984	C3							CaCO3	1130
23	5	1984	C6							CaCO3	1040
23	5	1984	C7							CaCO3	970
23	5	1984	D6							CaCO3	1130
23	5	1984	D7							CaCO3	820
6	6	1984	C2					TSP	8		
6	6	1984	C3					TSP	8		
6	6	1984	C4					TSP	8		
6	6	1984	C5					TSP	8		
6	6	1984	C6					TSP	8		
6	6	1984	C7					TSP	8		
6	6	1984	C8					TSP	8		
6	6	1984	C9					TSP	8		
6	6	1984	D5					TSP	8		
6	6	1984	D6					TSP	8		
6	6	1984	D7					TSP	8		
4	7	1984	C2					TSP	8		
4	7	1984	C3					TSP	8		
4	7	1984	C4					TSP	8		
4	7	1984	C5					TSP	8		
4	7	1984	C6					TSP	8		
4	7	1984	C7					TSP	8		
4	7	1984	C8					TSP	8		
4	7	1984	C9					TSP	8		
4	7	1984	D5					TSP	8		
4	7	1984	D6					TSP	8		
4	7	1984	D7					TSP	8		
1	8	1984	C2					TSP	8		
1	8	1984	C3					TSP	8		
1	8	1984	C4					TSP	8		
1	8	1984	C5					TSP	8		
1	8	1984	C6					TSP	8		
1	8	1984	C7					TSP	8		
1	8	1984	C8					TSP	8		
1	8	1984	C9					TSP	8		
1	8	1984	D5					TSP	8		
1	8	1984	D6					TSP	8		
1	8	1984	D7					TSP	8		
5	9	1984	C2					TSP	8		
5	9	1984	C3					TSP	8		
5	9	1984	C4					TSP	8		
5	9	1984	C5					TSP	8		
5	9	1984	C6					TSP	8		
5	9	1984	C7					TSP	8		
5	9	1984	C8					TSP	8		
5	9	1984	C9					TSP	8		
5	9	1984	D5					TSP	8		
5	9	1984	D6					TSP	8		
5	9	1984	D7					TSP	8		
10	10	1984	C2					TSP	8		
10	10	1984	C3					TSP	8		
10	10	1984	C4					TSP	8		
10	10	1984	C5					TSP	8		
10	10	1984	C6					TSP	8		
10	10	1984	C7					TSP	8		
10	10	1984	C8					TSP	8		
10	10	1984	C9					TSP	8		
10	10	1984	D5					TSP	8		
10	10	1984	D6					TSP	8		
10	10	1984	D7					TSP	8		

TABLE 10

Nutrient and Lime Inputs. Bogor, Indonesia, Cycle I, Wet Season

DATE			POND	FEED		MANURE		INORGANIC		LIME	
DAY	MONTH	YEAR		TYPE	kg/ha	TYPE	kg/ha	TYPE	kg/ha	TYPE	kg/ha
XX	XX	XXXX			XXX		XXX		XXX		XXX
12	10	1983	C1							CaCO3	3280
12	10	1983	C2							CaCO3	3280
12	10	1983	C3							CaCO3	2080
12	10	1983	C4							CaCO3	3500
12	10	1983	C5							CaCO3	2870
12	10	1983	C6							CaCO3	3500
12	10	1983	C7							CaCO3	4450
12	10	1983	C8							CaCO3	3030
12	10	1983	C9							CaCO3	3410
12	10	1983	D5							CaCO3	2970
12	10	1983	D6							CaCO3	2550
12	10	1983	D7							CaCO3	2550
26	10	1983	C1					TSP	8		
26	10	1983	C2					TSP	8		
26	10	1983	C3					TSP	8		
26	10	1983	C4					TSP	8		
26	10	1983	C5					TSP	8		
26	10	1983	C6					TSP	8		
26	10	1983	C7					TSP	8		
26	10	1983	C8					TSP	8		
26	10	1983	C9					TSP	8		
26	10	1983	D5					TSP	8		
26	10	1983	D6					TSP	8		
26	10	1983	D7					TSP	8		
23	11	1983	C1					TSP	8		
23	11	1983	C2					TSP	8		
23	11	1983	C3					TSP	8		
23	11	1983	C4					TSP	8		
23	11	1983	C5					TSP	8		
23	11	1983	C6					TSP	8		
23	11	1983	C7					TSP	8		
23	11	1983	C8					TSP	8		
23	11	1983	C9					TSP	8		
23	11	1983	D5					TSP	8		
23	11	1983	D6					TSP	8		
23	11	1983	D7					TSP	8		
21	12	1983	C1					TSP	8		
21	12	1983	C2					TSP	8		
21	12	1983	C3					TSP	8		
21	12	1983	C4					TSP	8		
21	12	1983	C5					TSP	8		
21	12	1983	C6					TSP	8		
21	12	1983	C7					TSP	8		
21	12	1983	C8					TSP	8		
21	12	1983	C9					TSP	8		
21	12	1983	D5					TSP	8		
21	12	1983	D6					TSP	8		
21	12	1983	D7					TSP	8		
18	1	1984	C1					TSP	8		
18	1	1984	C2					TSP	8		
18	1	1984	C3					TSP	8		
18	1	1984	C4					TSP	8		
18	1	1984	C5					TSP	8		
18	1	1984	C6					TSP	8		
18	1	1984	C7					TSP	8		
18	1	1984	C8					TSP	8		
18	1	1984	C9					TSP	8		
18	1	1984	D5					TSP	8		
18	1	1984	D6					TSP	8		
18	1	1984	D7					TSP	8		
22	2	1984	C1					TSP	8		
22	2	1984	C2					TSP	8		
22	2	1984	C3					TSP	8		
22	2	1984	C4					TSP	8		
22	2	1984	C5					TSP	8		
22	2	1984	C6					TSP	8		
22	2	1984	C7					TSP	8		
22	2	1984	C8					TSP	8		
22	2	1984	C9					TSP	8		
22	2	1984	D5					TSP	8		
22	2	1984	D6					TSP	8		
22	2	1984	D7					TSP	8