ANALYSIS OF ALPHA AMYLASE ACTIVITY IN VARIOUS LEAFY VEGETABLES

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Abstract:

Analysis of various leafy vegetables determine the alpha amylase activities Alpha amylase are break down the starch molecules it is activated o do work but some Naturally inhibitor are inhibits their activity the find out of some naturally inhibitor find Out the vegetables is used as diabities medicine the result is Hibiscus sabdariffa Is present naturally inhibitor are 100 % block the amylase activity. Is compare to Control of the gel diffusion method 1% agar and 0.5 % starch gel is used and gel Stained by I2KI solution.

Introduction:-

Leafy vegetables are used as day to day life food in human life. The some vegetable are found in alpha amylase activity and some in present inhibitor. Analysis In gel diffusion assay 1% agar and 0.5 % starch solution and stain as I2KI solution are view in inhibition activity sample are extracted in distilled water in over night.

Material:-

- 1) All sample are collected in local market.
- 2) Human saliva is alpha amylase activity is used.
- 3) Agar, starch, iodine are used as gel diffusion assay.

Method:-

- 1) All sample are cruse in fine powder using mortar and pastel.

- 2) 100 mg of sample was mixed with 1 ml distilled water incubated over night and centrifuge 10000 rpm in and supernatant is used as analysis.

Gel diffusion assay:-

1% Agar and 0.5% Starch is used as gel was prepared in glass plat and and well are prepared in borer and reaction mixture containing 100 micro liter dilute saliva and 100 micro liter sample and 50 micro liter buffer was prepared for each sample and load in respective wells and allow to diffused overnight next day gel was stained with I2KI solution.

Radial zone of starch hydrolysis was seen in control zone of starch hydrolysis in sample were compared with control.

Sample arecentrifuse at 10000 RPM 10 minutes supernatant collected.

100 micro liter sample+100 microliter dilute saliva 50 micro liter phosphate buffer pH 7.

Table

No	Name	Sample	Extract	Buffer Phosphate	Amylase	Result
1	Control	100 mg sample	1 ml D.W.	50 micro liter	100 micro liter	-
2	Anethumgraveolens	100 mg	1 ml D.W.	50 mico liter	100 micro liter	-
3	Rumixvesicaris	100 mg	1 ml D.W.	50 micro liter	100 micro liter	-
4	Coriandrum sativum	100 mg	1 ml D.W.	50 micro liter	100 micro liter	-
5	Spinaciaoleracea	100 mg	1 ml D.W.	50 micro liter	100 micro liter	-
6	Habiscussabdariffa	100 mg	1 ml D.W.	50 microliter	100 micro liter	+

Amylase activity in vegetable-

Result:-

- 1) Anethum graveolens, Rumex vesicarius, caorian drumsativum, spinacia oleracea, Hibiscus sabdariffa all vegetable are amylase activator but
- 2) Hibiscus sabdariffa was inhibit amylase activity

Conclusion:-

- 1) Vegetables are best human food of nutritional value.
- 2) The inhibitor are effects of digestive system like indigestion.
- 3) The amylase inhibitor are used as the diabetic disease controller.

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