SYNTHESIS OF SULFONAMIDE DEHYDROABIETANE DERIVATIVES OF AMINO ACIDS

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Dehydroabietane-derived compounds possess a wide spectrum of biological activity, among which antiviral, antibacterial, antileishmania, anti-tuberculosis, antitumor and antioxidant properties have been studied. They can be used to treat cardiovascular disease, gastric ulcer and SARS [1].

A promising area for further search for potential biologically activedehydroabietane type substances is the synthesis of their conjugates with amino acids. We have obtained a series of new compounds with fragments of methyl esters **3–13**, **25** and hydrazides **14–24** of natural amino acids. In the case of lysine, bis-sulfonamide **26** and α -naphthylacetic acid amidoanhydride **27** were also synthesized.

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References

- [1] A. Helfenstein, M. Vahermo, and D. A. Nawrot, *Bioorganic & Medicinal Chemistry*, 2017, V. 25, p. 132–137.