

Isolation of Lectins from the Seeds Hippophae rhamnoides L.

V.N.Samorodov, S.V.Pospelov and E.L.Golynskaya, Agronomy Department,  
Agricultural Institute, Poltava, USSR.

At present the investigations of the presence of lectins in medicinal plants are expanded. However, many of their species possessing a broad spectrum of phytotherapeutic effects are not studied yet as to the presence of these compounds. One of such plants is Hippophae rhamnoides L.

We have ascertained that the seeds of this species contain lectin of a high hemagglutinating activity. Its initial purification with subsequent lyophilization was carried out by means of low temperature ethanol fractionation in two stages. During dilution of the preparation of 1 mg/ml the agglutination titer mounted to 1:524288. The isolated lectin did not possess a specificity to human blood groups.

It is proved that the present lectin is available not only in fruit, but also in the shoot-the waste from the production of sea-buckthorn oil. It opens the road to its rapid and inexpensive production.

A conclusion is drawn that the unique and various medicinal properties of Hippophae rhamnoides L. can be conditioned by the presence of lectins in it.