

Lectins of Soil: Isolation and Possible Fuction.

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Earlier we reported in the Book of Abstracts Interlec-11 about the discovery of compounds in soil which possess agglutinating activity. The methods of their extraction, however, need a further elaboration. Therefore various conditions of lectin isolation from soil were studied by means of extraction with 0.9% NaCl, with phosphate and phosphate - citric buffers. Agglutination activity was determined by conventional methods with human erythrocytes of group O(1) in ABO system.

It was ascertained that the highest agglutination titer was during the extraction by means of phosphate-citric buffer. It points out a high degree of lectin extraction. The using of saline solution was ineffective, and it is evidence that lectins in soil are immobilized. To obtain an impartial information, it is proposed to extract them by means of the buffer, pH of which corresponds to pH or to water pH of soil.

KCl

It is supposed that lectins are carriers of a specific information and they can take part in allelopathic interactions in-the soil-plant system.