

Change in lectin specificity of winter wheat seedlings in the course of infection with mycoplasmas

Trifonova T., Maksyutova N., Timofeeva O., Chernov V.
Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

The activity of soluble lectins in leaves and roots of seedlings of winter wheat (*Triticum aestivum* L.) cultivar Mironovskaya 808 increased 1 day and 2 days, respectively, after infection with the mycoplasma *Acholeplasma laidlawii* 118. Analysis of acid-soluble proteins of wheat leaves by PAGE revealed the appearance of 22- and 20-kDa polypeptides, the disappearance of a 14-kDa polypeptide, and an increase in the content of polypeptides with molecular weights of 76, 48, 25, and 18 kDa. The 18-kDa polypeptide is a subunit of wheat germ agglutinin. A change in the activity of lectins may be a nonspecific response of plants to infection with the pathogen.

<http://dx.doi.org/10.1023/B:ABIM.0000046995.13033.57>
