## BIORATIONAL PESTICIDES IN AN INTEGRATED PROTECTION SYSTEM OF APPLE TREE

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## Abstract

The article discusses the most important results of use the biorational preparations (elicitors) Reglalg, Recol and Paurin as inductors of plant immunity to apple scab (pathogen – *Venturia inaequalis* Aderh. ascigerous and *Fusicladium dendriticum* (Wallr.) Fuch conidial stages) in an integrated protection system. The experiments were carried out in 2015 in Bacioi mun. "AgroBrio" Ltd., on apple varieties Vagner Prizovoi on the area of 2 hectares. The scab prevalence (P) ranged from 14.1 to 18.7 (on leaves) and 9.8 to 18.7 (on fruits). In the chemical standard scab prevalence consisted 23.4 both on leaves and fruits. The development of disease (R) varied from 2.0 to 3.5 (on leaves) and from 4.2 to 5.5 (on fruits) and was comparable to the chemical standard (2.2 and 4.3 on leaves and fruits respectively). In reference the scab prevalence (P) reached to 37.0 on leaves and 43.7% on fruits, the degree of development of disease R was 19.1 on leaves and 29.2% on fruit. Chlorophyll index depended on variants: Reglalg 103; Recol 98.99 and Paurin 93.06 mg / cm<sup>2</sup> (standard – 80.22 and reference – 68.9 mg/cm<sup>2</sup>). The growth of shoots on the variants ranged from 19.7 to 23.2 cm (the standard – 20.7 and control – 15.7 cm).

Key words: Bioelicitors, Inductors of Immunity, Apple Tree, Biometric indices