

**REGARDING THE IMPROVEMENT
OF THE PHYTOSANITARY STATE OF THE OAK STANDS
OF THE ZHYTOMYR POLISSIA OF UKRAINE**

Smagin¹ O.Yu., Shvagro² M.V., masters
Scientific supervisors – candidate of agricultural sciences,
associate professor **V.M. Turko¹**,
candidate of agricultural sciences, associate professor **V.P. Vlasyuk²**
Polissia National University

The mass periodic dieback of forest stands with the participation of common oak of different age groups indicates insufficient knowledge on pathogenesis and etiology in the general chain of the pathological phenomenon of dieback of oak stands. An important stage in the development of a system of measures to protect forest stands is the periodic forest pathological surveys (monitoring and supervision) for the timely detection and identification of the species composition and the prevalence of bacteria and wood-destroying fungi in the oak stands. Of particular importance today is the process of creating rot-resistant pathogens with the correct placement and selection of tree species, in particular, we are talking about the use of introducers, etc. Also, among preventive measures to protect stands from pathogens of trunk rot, it is advisable to form stands of mixed composition with the use of species with increased immunity, selected by the method of genetic analysis. In stands, it is necessary to periodically remove and destroy the sporocarps of xylotrophic fungi. Mechanical or other types of injuries and damage to trees should be prevented. To reduce damage to tree trunks by representatives of wild theriofauna, it is necessary to adjust their numbers. Take timely measures to clean up dieback wood, windfall and fallen trees, mortmass, etc. Thus, bacterioses in forests cause the most dangerous damage with further massive epiphytotic dieback. In recent years, the use of biological preparations has been recognized as the most effective strategy in the fight against plant bacteriosis. Their effectiveness is ensured by two mechanisms of action – antagonism against pathogens and stimulation of phytoimmunity. The range and effectiveness of these products is growing every year. For example, the use of products based on *Agrobacterium radiobacter* (Galltrol, Norbac, Nogall) is effective against bacterial cancer (*Agrobacterium tumefaciens*), against bacterial "fire blight" (*Erwinia amylovora*) products based on *Bacillus pumilus* (Sonata), *Bacillus subtilis* (FitoDoktor, Serenade, BS-F4) or *Pantoea agglomerans* (Blightban, Bloomtime, BlossomBless, PomaVita).