# USEFUL ENTROPY-TYHOON OF AGROCENOSIS AND WAYS TO INCREASE ITS EFFICIENCY

## Department of Plant Protection named after A.K. Mishnyov

4
Post-graduate student (Ph.D)
4,0
credit
88 (44 hrs. of lectures, 44 hrs. of practical classes)

### A general description of the discipline

The program "Useful Entropy-typhoon of Agrocenoses and Ways to Improve Its Efficiency" aims to help students to acquire knowledge in entropy-typhoon of agrocenoses, to deal with species of insect-phytophages on which they develop and the increase of their efficiency.

The course consists of the following parts: Theoretical foundations of insect breeding technologies. Breeding predatory mites. Breeding predatory bugs, coccinellidae. Breeding reticulate, bivalve, trichogramma. Cavalry breeding.

Students' knowledge of the discipline and other related disciplines indicates the level of qualification of graduate students in the direction 202 "Plant Protection and Quarantine".

#### **Topics of lectures:**

1. The subject and objectives of the discipline "Useful entropy-typhoon of agrocenoses and ways to improve its efficiency". 2. Biological features of entropy-typhoon. 3. Predatory insects, species composition of their victims. 4. Parasitic insects, species composition of their victims. 5. Theoretical foundations of technologies for breeding beneficial insects. 6. Phytoseid family tick mating technologies. 7. Technologies of breeding predatory bugs of babies. 8. Technologies for breeding predatory bugs of the family of slugs. 9. Technologies of breeding predatory bugs of the Shields family. 10. Technologies for breeding predators of the coccinellidae family. 11. Cyclone breeding and harmony technologies. 12. Technologies for breeding predatory insects from a series of retinae. 13. Technologies for breeding a van. 14. Technologies of breeding insects of a number of bipeds. 15. Fertilizer technology. 16. Trichogram breeding parasites of the dragonid family. 19. Technologies for breeding parasites of the family aphelinids. 20. Laboratory dilution and use of trichogramma. 18. Technologies for breeding parasites of the aphid family. 22. Technologies for breeding parasites of the family aphelinids. 20. Laboratory dilution and use of encarsia. 21. Technologies for breeding parasitic insects of the aphid family. 22. Technologies for breeding parasites of the euloid family.

#### **Topics of practical classes:**

1. To study biological features and stages of laboratory breeding of phytoseylus mite. 2. To study the biological features and stages of laboratory breeding of metaceus mite. 3. To study the species composition, biological features, stages of laboratory breeding of predatory ticks of the genus neoseiulus. 4. Familiarize yourself with the methods of using predatory mites and the range of their victims. 5. To study the species composition and peculiarities of the biology of anthocorrhidae. 6. To study the species composition and peculiarities of the biology of oriental bedbugs. 7. To study the stages of laboratory breeding of predatory bugs anthocorides. 8. Familiarize yourself with the methods and conditions of use of anthocorid bedbugs. 9. To study biological features and stages of laboratory breeding of predatory bugs of blinders and guards. 10. To study the biological features and the stages of laboratory breeding of sunshine harmony, leis and fourteen-point propelia. 12. Familiarize yourself with the methods and conditions of use, the number of victims of predatory retinae. 13. To study biological features and stages of laboratory retinae. 13. To study biological features and stages of predatory breeding of laboratory breeding of use, the number of victims of predatory retinae. 13. To study biological features and stages of laboratory retinae.

laboratory breeding of predators of families of gold-eyed and hemorrhoids. 14. To study the biological features and stages of laboratory breeding of predatory fox flies and syphids. 15. The main species and ecotypes of trichograms are their biological features. 16. Stages of laboratory dilution and use of trichogramma. 17. Stages of laboratory breeding of braconid dacnose. 18. Stages of laboratory breeding of braconide gabbrocon. 19. Stages of laboratory breeding of apelinus parasites. 20. Stages of laboratory dilution of encarsia. 21. Stages of laboratory breeding of parasites of the genus Lisiflebus. 22. Stages of laboratory dilution of diglyphus: a parasite of the euloid family.