Растителна защита
електронно списание за растителна защита
семена, торове и земеделие
ISSN 2815-522X

Issue 4/2018 of the journal "Plant Protection"

Автор(и): Растителна защита
Дата: 08.05.2018 *Брой:* 5/2018

See which topics are current in this issue.

On 9 May issue 4/2018 of the journal „Plant Protection“ is expected to be released from print. The topic of the issue is the grapevine. In this issue we will introduce you to the history of the grapevine in our lands, the tradition of cultivating vineyards in Bulgaria, wine production, varieties with increased resistance to diseases and, of course, the diseases and pests that attack the grapevine plantations.

The grapevine is attacked by over 40 types of non-infectious and infectious diseases and over 100 species of insects, mites, nematodes and other pests. Among the diseases currently important are downy mildew, powdery mildew, grey mould, bacterial cancer, esca, anthracnose; diseases damaging shoots and wood, as well as virus

diseases with nematode vectors from the genera Xiphinema and Longitarsus. In recent years phytoplasma diseases have also appeared. Almost all of these diseases are included in the list of the Ministry of Agriculture, Food and Forestry (MAFF) for monitoring and implementation of chemical control.

What are the methods for their control, why when establishing a new vineyard it is mandatory to study the nematode status of the soils and, in the presence of vectors, the necessary agrotechnical measures must be taken even before planting the vines, as well as many other useful insights you will learn in the current issue of the journal. The topic is extensive and therefore we have focused on several important points for the development and cultivation of healthy grapevine plantations. In recent years bacterial cancer and phytoplasma diseases have been a real challenge for every vine grower in our country. Little known is the fact that in the 1970s huge vineyard areas were established and new varieties were introduced, but this in turn also led to the introduction of new, previously unknown in our country, highly aggressive pathogens. When performing microscopic analyses of infected vines, two very dangerous pathogens were isolated and identified, the causal agents of eutypa dieback (Eutypa armeniacae) and excoriose (Phomopsis viticola).

How pests on winter buds are determined and what is the difference between swelling and swollen buds you will learn from Prof. Angel Harizanov and Prof. Vili Harizanova from the Agricultural University in Plovdiv. The mites that occur on grapevine plantations can also be beneficial (predatory mites), therefore it is of exceptional importance for vineyards to preserve the biological balance between them and their natural enemies. Only towards the mid-1980s, with the restriction of the use of broad-spectrum insecticides against grape moths and other pests, did the restoration of the relative biological balance between harmful mites and their acarophagous enemies begin.

A high degree of weed infestation usually leads to less developed shoots, lower bunch weight and lower yield per decare. This is a serious problem that requires good knowledge of weeds and of the methods for their control. Good awareness in this respect also enables the correct selection of herbicides and tillage operations to minimise the damage caused by harmful vegetation.

Always stay well informed with the journal „Plant Protection“!

We are restarting our favourite column „Quarantine“, in which in this issue you will learn in detail about the bacterium Xylella fastidiosa, identified on olive in the Apulia region of Southern Italy. According to the Central Plant Quarantine Laboratory, from the beginning of the monitoring programme in 2014 until now, no infection with Xylella fastidiosa has been established on the territory of Bulgaria.

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In the „Traffic light“ column we will alert you that in the orchard there is a massive attack of diseases and pests after flowering. In the vegetable garden in May only from us can you learn what the system is for protecting tomatoes, peppers and eggplants from pests.

In four consecutive issues of the journal „Plant Protection“ we will publish interviews with farmers who are clients of „Viola“ JSC, the trading company for pesticides, fertilisers and seeds based in Sliven. In this issue expect our conversation with Hristo Stoynov, a vine grower and licensed wine producer from the village of Lozenets. In the beginning it is difficult and for Hristo the inherited 10 decares of vineyards are more of a burden than a promise of success. But gradually, with a lot of work and energy, he and his family today can boast 100 decares of vineyards, half of them new plantations with elite wine varieties Cabernet, Merlot, Chardonnay, Muscat Ottonel and Red Misket. He also owns a small boutique winery where 7 wine brands are produced. For him, working “in the open”, in full compliance with all rules, is a profitable formula that he has firmly followed since the very establishment of his company.

In the supplement „Dangerous pathogens in agricultural crops” Chief Assistant Prof. Dr. Zvezdomir Zhelev will present the significance and types of forecasting models in cereal crops. Over the past five years at the Agricultural University in Plovdiv, within two projects for working with farmers, funded by the America for Bulgaria Foundation, modern internet-based forecasting models for diseases in apple, cherry and grapevine were introduced. The latter have found wide application among producers and have become an extremely important tool for them. The positive results in perennial crops, as well as the strong development in the grain production sector, have raised the question of the applicability of forecasting models in cereals.

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A. Harizanov, V. Harizanova – Preserve the biological balance between mites and their natural enemies

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ISSN 2815-522X

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