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Activities in the orchard in February

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After the warm for the season weather during the last week of January, in the first ten-day period of February the agrometeorological conditions underwent a change. The substantial drop in temperatures in the middle of the first ten-day period prevented premature, undesirable vegetation in some tree species.

During most days of the second and third ten-day periods, temperatures close to the climatic norms will be observed, with the forecast minimum temperatures reaching down to -8 degrees.

The expected precipitation in February is around and below the norm and the soil moisture reserves in some places in the Danube Plain and in the southern regions (agrometeorological stations: Novachene, Razgrad, Dolni Chiflik, Kazanlak, Lyubimets) in the 100 cm layer will remain unsatisfactory for the season.

During the second and third ten-day periods of February no significant precipitation is expected and the conditions will allow the implementation of seasonal agrotechnical activities: pruning in fruit orchards and winter plant protection spraying in fruit trees.

Agrotechnical activities

In fruit nurseries

Planting of rootstocks in the nursery begins. The rootstocks budded in the previous year are inspected. The ties are removed if this has not been done in autumn. Rootstocks whose buds have died during the winter are grafted with scions.

The wild part of the rootstock above the bud is cut off. This is done before the start of sap flow, because otherwise the young plant is weakened. The rootstocks are cut 2–3 cm above the grafted bud with the cut sloping in the opposite direction to the side of the bud. Cutting the rootstock to a stub 12–15 cm above the grafted bud is practiced in nurseries exposed to strong winds.



When soil moisture is appropriate, the first inter-row cultivations are carried out with a cultivator or disc harrow, and in the row – with a rotary tiller with an offset section, in order to prepare the soil surface for treatment with soil herbicides.

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Scions are collected for top-working trees of low-value varieties and for replacing buds that have perished during the winter in fruit nurseries.

Care is taken of the stratified seeds. When the weather warms up, sowing in the seedbed may begin.

In fruit orchards

The uprooting of diseased, old and dried trees that no longer bear fruit is completed. The repair of old and the construction of new trellis systems continues. Winter pruning for production and rejuvenation of pome fruit species also continues.

During the second and third ten-day periods of February, trees can be planted in new fruit orchards; this is also the time when phosphorus and potassium fertilizers are applied.



The conditions during the second and third ten-day periods are suitable for winter pruning for production of stone fruit species.

Monitoring continues in vegetative facilities for further growing of kiwifruit (Actinidia) and of rootstocks for citrus and pistachio in warm greenhouses.

Plant protection activities

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In fruit orchards

Caterpillar nests, egg clusters and rings, shoots and twigs infected by diseases and attacked by pests, mummified fruits, etc., are cut out, collected and burned, if this has not been done in autumn.

Packaging materials are disinfected by fumigation in closed premises or by spraying with a solution of a fungicide and an insecticide.

If it has not been carried out in January, during the second and third ten-day periods of February winter spraying is performed.

It is carried out with a 3% solution of Para Zomer or Acarzin against scale insects and aphids, psyllids, woolly apple aphid, winter eggs of winter moths, mites, pupae of leaf-mining moths, etc., which overwinter on the trunks and in the crowns of the trees. Spraying is done only when the population density of some of the pests is above the economic threshold of harmfulness.



Spraying is carried out with a 2% Bordeaux mixture or other copper-based products against pocket plum (plum pockets) in plum trees, fire blight in pome fruit species, peach leaf curl, shot-hole disease in stone fruits, brown rot, bacterial blight, fallen leaves to destroy the overwintering inoculum of apple and pear scab, red leaf spot in plum, anthracnose in walnut, cercospora leaf spot and scab in almond.

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If weed emergence has started and the soil is sufficiently moist, soil herbicides are applied in the southern regions of the country. Only the tree-row strip of the orchards is treated. Before applying the herbicides, the soil is loosened and levelled. Herbicides are sprayed with sprayers that are not used for spraying with other pesticides. When this is not possible, after spraying, the tanks, pipelines and nozzles of the sprayers are thoroughly washed with water in which 2% washing soda or quicklime has been dissolved.

Stomp-Aqua may be used at a rate of 250–300 ml/da or another herbicide with the active substance pendimethalin in pome and stone fruit species as well.

In berry plantations

If it has not been carried out in January, during the second and third ten-day periods of February winter spraying is performed.



Against didymella, coniothyrium, anthracnose, grey mould, white leaf spot and red leaf spot in strawberry (if it has not been done after harvest), and leaf spots in raspberry, treatment is carried out with a 1% Bordeaux mixture or other copper-based products, also spraying the fallen leaves.

Against California red scale in berry crops, treatment is carried out with a 3% solution of Para Zomer or Acarzin.

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Soil herbicides are applied, if weather conditions permit. Stomp-Aqua may be used at a rate of 250–300 ml/da or another herbicide with the active substance pendimethalin, incorporating it into the soil.