

November 2020

Fertigation management for Cherry Trees

Cherry is a deciduous tree that requires about 1000 hours of cold temperatures to get fruits. Cherry trees are cultivated in the high mountain areas of Israel - the Golan Heights and the Judea Mountains due to its special cold climate.

In Israel, there is only one main variety of cherry, "Kayos", which usually ripens in the first half of June, and a few varieties of sweet cherries such as the "Borella", which ripens first, in the first half of May. It is followed by the "Tzinok", "Bing" and "Ranier" varieties. "Ranier" cherries are yellowish - pink, while other species colors range from red to almost black.

As cherries ripen relatively early in the season, the fertilization process is essential as soon as the tree blooms.

Fertigation of about 60%-80% of fertilizer dose will take place until two weeks from the picking season, while the remaining fertilizer dose will be applied after the picking.

To define the nutrients elements required for the cherry, usually based on leaf analysis. The period for leaf sampling within two weeks before picking, to two weeks after picking. Recommendation for required nutrients elements based on this leaf analyzed values:

Nitrogen - Low value: less 2.4%, High value: over 3%.

Phosphorus - Low value: less 0.16%, High value: over 0.23%

Potassium - Low value: less 1.4%, High value: over 2%.

Cherry trees might also suffer from micronutrient deficiency, especially iron.

Therefore, the best recommended to use upon the first fertigation with "**Spring ammonium fertilizer**" - **Nitrogen fertilizer solution with "FerroGat"** (highly concentrated, iron chelate solution)


In orchards irrigated with desalinated water, deficiencies of calcium and magnesium might occur and should be taken into account. It is recommended to supplement the deficits with a "**YAMIT**" solution, containing calcium and magnesium in the required ratio.

Besides, the use of a fertilizer containing a "**Bio HumiGat**" - **humic and Fulvic acids**, supplements throughout the fertilization season will improve the tree's health and the quality of the fruit. In an experiment carried out with early edible grapes, it was found that early spring fertilization combined with **Bio HumiGat** stimulated early ripening and resulted in greater fruit size.

Cherry trees require proper irrigation. The tree consumes relatively high amounts of water. Tensiometer devices are of great help in deciding when to start irrigation during spring (because of the issue of early ripening) and during the season as well as defining required amounts of irrigation water.

In the case of rain, there is a risk of damage to the fruit that might burst and to the crop.

Since cherry trees require large amounts of water, it is recommended to add to the nitrogen-containing fertilizer the "**Blue**" additive, which inhibits ammonium from nitrification to nitrate in the soil, thus preventing leak of nitrogen below the area of the root zone.



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Moreover, the absorption of ammonium in the roots creates an acidic environment in the roots rhizosphere, that stimulates the absorption of micronutrients and phosphorus optimally.

For further information and fertilization customized plans, please contact **Gat Fertilizers Agronomist** in your region.

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