

# Spraying of stone fruit trees according to the Tree Row Volume (TRV) Concept and Residues of the Fungicide Teldor (a.i. fenhexamid)

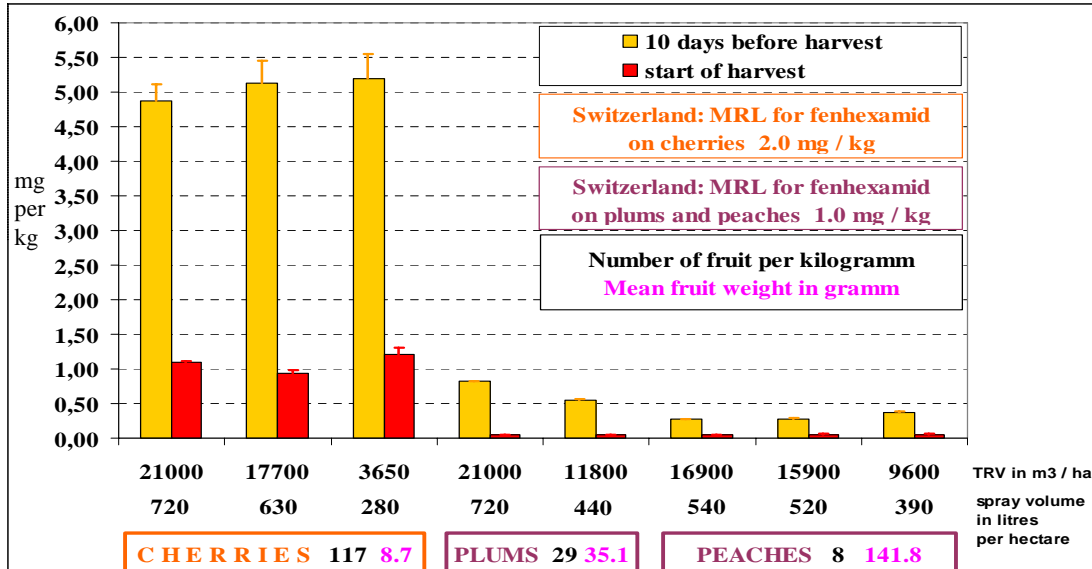
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The volume of the crowns of the tree-rows on one hectare is called the tree row volume (TRV), calculated in m<sup>3</sup>/ha. For on farm purposes the TRV can serve as a practical guideline to adapt the product dosage to the size and growth of the trees.

In Switzerland selected cherry, plum and peach orchards differing considerably in their TRV (graph) were sprayed with a spray broth always containing 0.4% of the fungicide Teldor (a.i. fenhexamid). The volume of the spray broth was adapted to the TRV (graph). In Switzerland the registered product dose for orchard crops is defined by a 4-times concentrated spray broth volume of 400 litres per ha at a standard TRV of 10'000 m<sup>3</sup> / ha.



**Top:** Axial fan sprayer delivering 520 litres per ha of a 4 times concentrated spray broth (2.08 kg or 130 % of the registered dose of 1.6 kg/ha) of Teldor in a peach orchard with a TRV of 15900 m<sup>3</sup> / ha.

**Left:** Residues in mg per kg fresh fruit of fenhexamid on cherries from 3 distinct orchards, plums from 2 orchards and peaches from 3 orchards (left to right) 10 days before the beginning of the harvest and at the beginning of the harvest.



Sampling cherries over the entire crown of the tree for the determination of residues of fenhexamid a.i. of the fungicide Teldor

## Results :

Residues of fenhexamid on fruit immediately obtained after the final treatment 10 days before the beginning of the harvest were in the same range within each stone fruit species. Spray volumes four times concentrated had been adapted to the distinct Tree Row Volumes.

Differences in the level of residues between fruit species were partly due to differences in fruit size and weight. Small fruit count with a higher number of fruit per kg than bigger fruit which results in a higher total fruit surface per kg freshweight.

At the beginning of the harvest residues were always below the maximum residue limit valid in Switzerland.

Experimental on purpose under- or overdosage, not in line with TRV, gave inferior results: insufficient efficacy (underdosage) or stained fruit (overdosage); data not shown.