

BÖLW information

Organic viticulture and potassium phosphonate

In Germany, 7000 ha are farmed organically. In recent years, many vintners have also decided to make the switch. As a result, since 2007, the area of organic vineyards has tripled, now making up 7.5 percent of the total vineyard area in Germany. The increase in organic vineyards matches consumer desire for sustainable, organically certified production. Vintners are enabled to create expressive wines of an individual character³ which are strongly influenced by their terroir.

Organic winegrowing means doing without chemical and synthetic plant protection agents, herbicides of any kind and readily soluble synthetic nitrogen fertiliser. The vineyard ecosystem, and especially soil fertility, are assisted and promoted by biodiverse greening and intense humus management. Organic winegrowing protects groundwater from damaging inflows.

But ever since the fungal plant disease "downy mildew" (*Plasmopara viticola*) was imported in 1880, viticulture without the use of plant protection agents has not generally been possible in Europe. Organic viticulture has the same problem. In Germany, the spread of "downy mildew" - which prefers warm, humid conditions - is accelerated by the effects of climate change.

Organic vintners have been battling this disease indirectly by planting fungus-resistant varieties (PIWIs) and by using plant fortifiers and copper as a plant protection agent directly on "conventional" grapevine varieties.

In order to reduce dependency on copper in organic viticulture, potassium phosphonate has been in use for some time. The application of potassium phosphonate on grapevines triggers resistance mechanisms. This creates natural resilience and increased resistance of the grapevines against fungal diseases. Until now, its application was approved for organic farms in several EU countries. But the change to the law now requires the substance to be newly approved for further use in organic farming. The Federation for the Organic Food Industry (BÖLW) is in favour of this.

Potassium phosphonate is comparatively harmless for people and the environment. In the soil, it is broken down into potassium and phosphonate. Both are essential nutrients for plants, animals and people. Potassium phosphonate has the character of a natural substance. As such, it can be reconciled with the principles of organic farming.

Residues of potassium phosphonate in plants are unproblematic for human health. But in order to nevertheless prevent any residues, the BÖLW promotes limiting the use of the substance to the period until the grapevine's flowerhoods fall. This prevents deposits in the fruit and the formation of residues.

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