ARTIFICIAL POLLINATION IMPOSSIBLE WITHOUT BEES

The result of artificially pollinating the Red Doyenné du Comice depends on a great number of circumstances. Among other things, the pruning method applied, the stage of development and weather conditions at the moment of application, the application technique itself, etc. This is made clear by the explanation given by advisor René Bal of DLV Plant consultancy in the Netherlands concerning the pollination trials that he carried out at the Westende fruit farm in Fijnaart in the Netherlands. One of the trials involved a daily pollination, using a little brush to determine the right moment of pollination. This showed an upward trend in the percentage of set fruit up till 25 April. After this date the weather became more unfavourable for flowering and the fruit setting percentage declined. Bal also researched the influence of the amount of pollen applied. He did this at two locations, in Fijnaart and Werkhoven. The trial compared a dosage of 80, 160 and 320 grams of pollen per hectare. The first application took place at the start of flowering and the second at 40-50% open flowers. The results were very unpredictable, only the dosage of 80 grams per hectare seemed effective and the second application did not have the desired surplus value this year. The double dosage hardly added any extra value and the fourfold dosage even seemed to reduce fruit setting. The only conclusion that can be drawn from this trial is that artificial pollination offers no guarantee for better fruit setting.

The question DLV wanted to answer during trials this year was: "Is it possible to optimise artificial pollination by means of certain additions?" Bal stated. For that purpose the Biowave leaf fertilizer or the gibberellin-preparations GA4/7 or GA3 had been added. All three products added nothing extra compared with 80 grams of pollen per hectare without additions. Fruit setting in the object with GA4/7 added to the pollen, was in fact equal to untreated and GA3 even appeared to have a negative effect on pollination. The count was carried out in the week of 20 June, when the June drop was nearly over.

During trials artificial pollination of the Red Doyenné (Sweet Sensation) pear variety failed to persuade. *EFM*

The most important conclusion of the day may well have been, that artificial pollination has little effect without the presence of bees in the orchard. Moreover, bees can help in choosing the day when artificial pollination takes place. The moment bees are active in flight is right for artificial pollination. "The weather of the following days also plays a decisive role in the success of artificial pollination." "There is always a day when artificial pollination is possible", in Bal's opinion. "Sometimes there is a window of one single day and then it is not advisable to depend on a contractor", was the conclusion drawn by both Bal and some Sweet Sensation growers who were also present. *(EFM, AV)*

PRODUCTS TESTED AGAINST WHITE HAZE

In a laboratory trial carried out by pcfruit in Belgium, the Bellis (boscalid + pyrachlostrobin) and Switch (cyprodinil + fludioxonil) products were effective against white haze *(Tilletiopsis spp.)* on apple. The Merpan (captan), Topsin M (thiofanaat-methyl) Delan (dithianon) and Pomarsol (thiram) products had no or only a poor effect.

White haze becomes noticeable during storage and especially occurs in years with wet and cold weather in the period before and during picking. Susceptibility of Nicoter, Elstar, Jonagold, Jonagored, Braeburn and Cripps Pink is above average.

The research was carried out by applying the Tilletiopsis fungus on nutrient mediums with increasing dosages of the crop protection products mentioned. The growth of the fungus is an indication here for the susceptibility of the fungus to the products tested. Bellis and Switch appeared to be most effective. Captan and Delan only had some effect in the highest dosages. And in the case of Topsin M none of the dosages tested had the least effect. *(EFM, GP)*