Scanning report

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Source materials and methodology

The ESTEBURG is the **Competence Centre for Fruit Production** in the areas of Lower Saxony, Hamburg, Schleswig-Holstein, Mecklenburg-Vorpommern and Sachsen-Anhalt within the Northern German Horticultural Cooperation. The ESTEBURG hosts several institutes serving different aspects of research and advisory activities both in integrated pest management and organic production systems. Extensive and direct interactions between these institutions in **research**, **advisory service** and **training** ensure a highly efficient support for regional fruit producers.

Jork is situated at the heart of the "Altes Land" in the Lower Elbe Valley not far from Hamburg. This region has a 700-year history of fruit production. Today there are some 900 fruit farms which cultivate and manage an area of 10,000 ha, making the Lower Elbe region the largest coherent fruit production area in Germany, and the second-largest in Europe.

Apples are the main fruit crop, good harvests being in excess of 300,000 t. **One-third of all German apples** are produced here. Elstar, Jonagold, Holsteiner Cox and Braeburn are the main produced varietys.

The Esteburg (Obstbauversuchsanstalt) is member of the EUFRIN network and involved in the EUFRIN Working Group "Variety testing on apples and pears". Furthermore the Esteburg ist a founding member of the German variety testers and breeders commission "Fachkommission Kernobst im Arbeitskreis Züchtung". These networks allow an exchange of information between variety testers, which is very useful to enlarge the knowledge around new apple and pear varieties and mutants of existing varieties.

Best practice findings

Variety testing of apples and pears

The department of pip fruit variety testing at ESTEBURG ist testing new apple and pear varietys, provided to us from breeders or licence owners all over the world. In intensive trials we examine the performance of this new fruit varieties under Northern German conditions of climate and soil. Every year in average 35 new apple varieties are planted in the first screening. From each variety we plant 10 - 12 trees on M9.

In the first screening we messure the yield with fruitsize and fruitweight, colour, russeting, harvesttime, maturitybegin and sugar-acid-ratio. Furthermore we collect datas of taste and appearance.

From the best varieties in the first screening mostly 60 to 120 trees are planted in a second screening. Depending on the variety we do trials on improving the fruit, chemical thinning, fertilisation, fruit quality, training and pruning.

Literatur

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