FRUITFULNESS IN PEACHES AND ITS RELATIONSHIP TO MORPHOLOGY and PHYSIOLOGY OF POLLEN GRAINS

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This bulletin is of greatest interest to research workers who are concerned with peach breeding. The information is also of value to commercial growers because it explains certain aspects of pollination which influence fruit production.

Of the 37 peach varieties examined, all were found to be self-fruitful except Candoka, Chinese Cling, J. H. Hale, and June Elberta.

Blossoms on branches which were covered with cloth bags produced less fruit than artificially self-pollinated blossoms although the bagged branches produced sufficient fruit for a commercial crop. Air currents provided an effective means to dislodge the pollen grains and to transport them from the anthers to the pistils of the enclosed flowers. Open-pollinated flowers set a heavier crop of fruit than bagged flowers, and a lighter set than by artificial pollination.

Elberta, Golden Jubilee, Halehaven and Rio Oso Gem were equally effective as pollinizers for Candoka and June Elberta which are pollen-sterile varieties.

Pollen-sterile varieties produced a small number of viable pollen grains which gave rise to a light set of fruit on bagged branches.

Peach pollen varied in shape from large-oval to small and large irregular shaped grains. —W.P.J.

OPATA BEST CHERRY-PLUM

V. E. Tollefson, grower,

Kingsdale, Minn.

Opata has given the best results among a number of plums and cherry-plums tested in plantings in Pine County, Minnesota. Opata and Kaga have produced good crops, Sapa and Oka have not. Superior does well if the season is favorable. Waneta, Toka, and Hennepin have withstood the winters and made fairly good growth but have produced little or no fruit.