

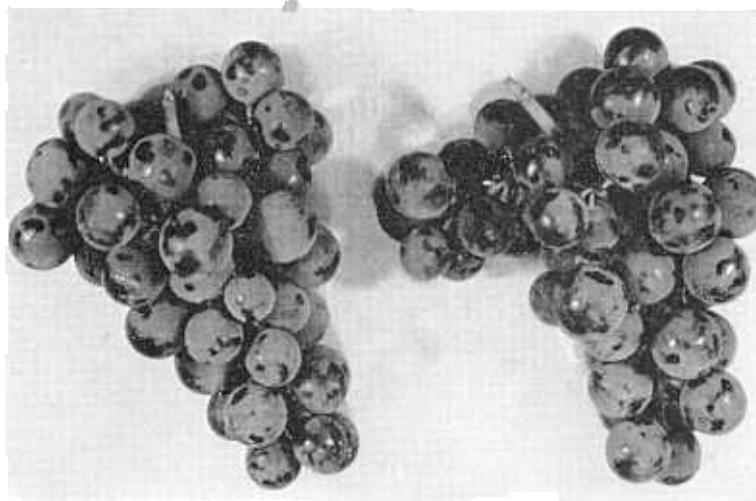
## Grapes: An Expanding Industry in Washington

By L. R. Bryant

Washington Agricultural Experiment Stations  
Pullman, Washington

Washington long has been known as one of the outstanding fruit producing areas and now another fruit crop is making state history. This is the juice grape. Climate, soil and growing season in the

the section where the greatest increases are anticipated. The Columbia River Valley near Wenatchee is the other one and here plantings are being contracted by a large eastern company. The third potential area is north and west of Kennewick in the lower end of the Columbia-Basin irrigation development. Plantings



Concord grapes, a standard variety wherever juice is made.

warm interior valleys of the state are factors back of the tremendous increases in acreage now going in. Yields are high here, 10 tons and even up to  $12\frac{1}{2}$  tons per acre in some instances with the Concord variety.

### Expansion Centered in Three Areas

Expansion is centering in two areas with a third one showing future possibilities. In the Yakima River Valley grape plantings are being made from around Sunnyside down to Kennewick. This is

here cannot be made until irrigation water becomes available.

The quality of Washington-grown juice grapes is as striking as are the yields. The sugar content of the juice runs as high as 18 to 20 per cent. In fact, the juice is processed without the addition of sugar to sweeten it.

### Concord the Principal Variety

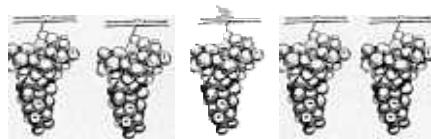
Plantings are restricted mainly to the Concord variety which processors want

for juice purposes. Others have been tried but have failed to meet processor's requirements. Fredonia has shown several faults, lower yields, a definite tendency for the berries to shell, and poor juice quality.

Sheridan is too late and, in most seasons, fails to mature. Campbell's Early, or Island Belle, which has grown mainly west of the mountains, doesn't produce

well and processors do not want it. Van Buren, a new variety, shows promise, but is as yet untested.

A few growers are producing *Vinifera* grapes but growing conditions for wine grapes are not the best with both yields and quality of fruit being below California standards. Consequently, expansion in Washington is limited to juice grapes and to the one variety, Concord.



## Why Varieties of Fruits and Vegetables Have Failed

By Neil E. Stevens,

University of Illinois

Competition between varieties of cultivated plants must be as old as agriculture. The continual selection of varieties for planting parallels in many respects the much more widely recognized natural selection among wild plants and animals. Even natural selection in the strictest sense plays a basic part among cultivated plants since only those individuals can be reproduced in any given crop season which in the last (or some recent) season were able to produce adequate seeds or other reproductive structures.

Above this level there must occur in

The rating scale used in this study was published by M. J. Dorsey and N. E. Stevens of the University of Illinois. An appreciable number of these scales are still available. The Authors will be glad to send copies to interested persons as long as the supply lasts.

Most of the computations on which these results were based were made by Phyllis Olmstead Conover.

all but the most primitive agricultures a continual, perhaps more or less unconscious, selection of those plants (eventually to be recognized as varieties) which proved most productive, most easily propagated, most attractive, or otherwise desirable. For many years the choice of the most suitable varieties of cultivated plants for any locality has been a recognized problem. Discussions regarding the comparisons of varieties had a prominent place in the meetings of the early horticultural societies in this country. With the development of formal breeding programs, the competition has become more intense, with the possible result that the commercial life of varieties will tend to become shorter.

### Only a Few Varieties Important Commercially

The results of this competition are evident in the fact that while literally hundreds of varieties of some fruits and