

diploid hybrid seedlings resulting from the cross of Franklin and U. S. 519-28 with the diploid muscadine grapes were selected and colchicine was applied to them. (For technique see reference 1.) It now appears that tetraploidy has been induced in some two dozen of these diploid hybrid seedlings. At the same time a few plants of the hybrid N.C. 6-15, mentioned previously, also were treated. There appear to be tetraploid changes among these also. If these colchipooids prove to be fertile like the colchipooid of N.C. 6-16, it should be possible to cross them and bring about segregation of characters, so that superior types combining the best characteristics of the bunch grapes and the muscadines can be selected.

The potentialities of this new, colchipooid method of breeding grapes to combine the desirable characteristics of the bunch grapes and muscadines appear to be great. However, a great deal of work by many competent workers will be required to develop its full possibilities.

#### LITERATURE CITED

1. Dermen, Haig. Colchipooidy in grapes. Jour. Hered. 45:159-172. 1954.
2. Patel, G. I. and H. P. Olmo. 1955. Cyto-genetics of Vitis: 1. The hybrid *V. vinifera* x *V. rotundifolia*. Amer. Jour. Bot. 42: 141-159. 1955.



*Attention readers.* If any of you should happen to know of a source of trees of the apple varieties Dyer, Cole Quince, Willow Twig or Black Gilliflower, please contact Mrs. Albert Kloppenborg at 901 East 7th Street, Newton, Iowa. She will be most grateful.

## Apple Varieties in Indiana

The following paragraphs dealing with some of the newer apple varieties, are based on performance at Purdue University farms during 1957.

**Idared:** At the Purdue Experimental Farm at Bedford, Indiana, trees of Idared in their third growing season became severely infected with fire-blight, to the extent that almost all of the trees will have to be removed. In comparison, only slight twig blight occurred on adjacent two year old trees of Jonathan, and none on two and three year old trees of Franklin, Ruby, Melrose and Crandall.

**Ruby:** At the Purdue Experimental Farm at Lafayette, three year old trees of Ruby produced their first specimen type fruit. The fruit, with a bright cherry red over-all skin color, was some of the most attractive ever grown in the area. Unfortunately the quality was only poor. Whether or not changes in culture, or time of harvest and storage would improve fruit quality is not known. The tree has the fault of being very upright, with narrow-angled crotches.

**Davey:** At the end of their seventh growing season, trees of Davey have remained extremely vigorous and productive at Lafayette. The fruit, however, continues to be heavily roped on the trees, develops very little color, and is too soft under Indiana conditions.

**Erickson:** This variety has good tree characteristics and appears to be highly resistant to disease at Lafayette. The fruit is semi-striped, cherry red over a green ground color. Lack of color and unevenness of color distribution do not make it very promising for Indiana.—*R. B. Tukey, Purdue University, Lafayette, Ind.*