

Grape Breeding Update – University of Arkansas Department of Horticulture

SERA 14 Progress Report 2005-2006

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The 2006 year was good for the grape program. The lowest temperature was 7°F in early December, but the remainder of the winter was rather mild. So, a fair winter screening was gotten but not severe. Spring frost was avoided. In general, winter injury was minimal. There was less rain early during harvest, leading to somewhat less cracking than seen in some years; later rains gave a good screen for this. Disease pressure was not severe this year for any pathogens.

Evaluation was conducted on approximately 7,000 seedlings resulting in 28 selections in 2006, all for table grapes, and most are seedless. Hybridizations were made in May resulting in seeds for seedlings for 2007 planting. Approximately 3000 seedlings were field-planted from 2005 crosses. Currently there are approximately 200 selections in the program under evaluation. There are several advanced selections in trial for potential release but no decisions have been made as yet on the next releases. Currently there is little interest in industry expansion for table grapes in the East, as reflected in sales of vines of the newer University of Arkansas cultivars.

There are a few wine selections in the program, and it is hoped that some cooperators in SERA can provide feedback on these selections in their trials. Those not testing these are welcome to attain cuttings for trial. These selections offer some rather unique backgrounds, but are not considered PD resistant.

One small but new initiative was begun in 2006, an effort in muscadine improvement. This effort involves cooperation with Dr. Patrick Conner at the University of Georgia. Just over 1200 seedlings were field planted in 2006, some from UGA crosses and the majority from open pollinated seeds from a UA cultivar trial. Crosses were also made at UA in 2006. The general goal of the program is to develop perfect-flowered, large fruited, winter-hardy fresh market cultivars. The location at Clarksville is on the northern edge of muscadine adaptation, and should allow the selection of some of the more hardy genotypes thus far in muscadine improvement. Although a large program is not envisioned, it is hoped that the effort will meet with success.

Finally, testing of Arkansas table grapes continues in the San Joaquin Valley of California with International Fruit Genetics (Dr. David Cain, breeder). It is very interesting to see the performance of these genotypes in the “ultimate” table grape growing area of the US. It is hoped that this cooperative effort will broaden the use of UA-developed material for the US and world.