ASIAN SPECIES COLD HARDINESS STUDY

In 1989 the U of M's grape project received a grant from the U.S.D.A.'s Agricultural Research Service to investigate the cold hardiness of asian species accessions at the National Germplasm Repository in Davis, California. This work has involved four seperate trips to Davis to collect wood for freezing studies. The first collection date was early December, 1989, the second was in late Februaury 1990, the third took place in early December 1990, and the forth was in mid-January, 1991. This range of dates was chosen to reflect hardiness levels in early, mid, and late winter. A wide range of species was examined, but work concentrated on V. amurensis with smaller numbers of V. piasezkii, V. riparia, V. longii, V. rupestris, V. labrusca, V. flexuosa, V. thunbergii, and V. ficifolia.

The results of this research will be published in a scientific journal after further analysis. By examining a preliminary graph one can see the general trend of the data we obtained. Graph D illustrates the pooled bud survival (primary and secondary buds averaged together) for one particular freezing run series (January, 1991). In this study Vitis longii, V. riparia, and V. rupestris tend to have similar hardiness levels while V. amurensis appears to be somewhat less hardy and V. piasezkii seems to be the least hardy of all.

Graph D. Bud Survival.

