

POTATO BREEDING

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The object of the potato breeding program in Washington is to develop one or more new varieties for the fresh market and processing industry that are superior to the Russet Burbank and other varieties grown in the State. Although Russet Burbank is the principal variety grown in the Northwest, it is very susceptible to leafroll, including net necrosis, and moderately susceptible to Verticillium wilt. It is also quite susceptible to internal discoloration following bruising. A new russet-skinned variety is needed that is resistant to these abnormalities and acceptable as a fresh market and processing potato.

In order to obtain such a potato it is necessary to develop russet parents which will transmit the resistant factors to their progeny. Such parents have been and are being bred each year.

Approximately 50,000 new kinds of potatoes are grown each year at the Irrigation Experiment Station. To date, two new russets, 12-3 and 168-3, have shown promise but further testing is necessary to determine if they are adapted to Washington. A new potato should be tested four or five years to determine if it has the necessary qualifications to become a new variety.