The Central Oregon Experiment Station continues to be a vital link in the total OSU cereal breeding and genetics program. During the past 20 years, the station has evaluated advanced selections of wheat and barley for their adaptation to Central Oregon. In doing so, they have provided information to the growers in the area regarding the potential of new varieties. The Central Oregon staff have also been instrumental in obtaining data which have been helpful in giving direction to the breeders in planning their crossing strategy for the development of new varieties.

As a direct result of this interaction between scientists at Central Oregon Experiment Station and the OSU breeders, a new winter wheat selection is being multiplied for possible release in 1985-86. Yield trials conducted at both Powell Butte and Madras have clearly shown the yield superiority of this selection over existing varieties.

Also, a direct input of the Central Oregon researchers has been the emphasis by the OSU breeders to develop short, stiff-strawed varieties which would be easier to irrigate with the current methods employed. A triple dwarf hard red spring wheat is now being evaluated to partially meet this need for shorter varieties.

In 1982, the spring barley and wheat breeding program was moved to Madras. This includes not only yield trials, but the evaluation of early generation progeny. Currently, generations from F2 through F6 are being tested at this site. These materials resulted from crosses made at Corvallis for feed and malting spring varieties and hard red spring wheats obtained from the International Maize and Wheat Improvement headquarters in Mexico.

A new dimension to this cooperative effort is the evaluation of the potential for varieties representing the hard red winter market class. Potential new varieties of this market class are being grown under a series of different fertilizer treatments to determine if a consistent and acceptable protein content can be achieved. If successful, such varieties would avoid the major dependence on soft white wheat.

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