

Status of Russian Wheat Aphid (RWA) - Resistant Feed Barley for Dryland Western U.S. (C08-mornhinweg122641-Poster)

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Abstract:

RWA is such a persistent and devastating problem for growers in the dryland areas of eastern Colorado and Wyoming, and western Nebraska, that barley is no longer grown in these areas. Before the introduction of RWA to the US, Otis barley fit a niche in dryland grower rotations, however, high susceptibility of Otis to RWA has removed this option. Marginal profit on dryland areas made treatment with systemic insecticides, which are necessary for control of RWA, a non-option for growers as well. 114 RWA-resistant germplasm lines in an Otis background with resistance from three different sources were developed for dryland areas of the western US by the USDA-ARS in Stillwater, OK and Aberdeen, ID. These lines were field tested along with Otis and Otis + Gaucho in a growers field in eastern Colorado in 2001. 77% of these lines yielded significantly higher than the checks even when aphid pressure was low. Previous studies suggest that all lines would outperform Otis if aphid numbers were high. Further testing is planned at several dryland locations in 2002 and the best agronomic types will be released as germplasm lines.

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