

EFFECT OF PLANTING DATE ON WEED CONTROL IN GLYPHOSATE-RESISTANT SUGARBEET. Andrew R. Kniss, Assistant Professor, Department of Plant Sciences, University of Wyoming, Laramie, WY 82071.

In order to achieve optimal yield, sugarbeet producers in the high plains will typically plant their crop in mid-April. However, due to adverse environmental conditions during sugarbeet establishment, it is not uncommon for a percentage of the sugarbeet crop to be replanted. Replanted sugarbeet fields may differ from early-planted sugarbeet with respect to soil temperatures and weed communities. Because of these differences, replanted sugarbeet may be more or less competitive with weeds when planted later in the season. Two field studies were conducted near Lingle, Wyoming in 2009 to 1) determine the best use of residual herbicides at various planting dates, and 2) quantify sugarbeet yield loss due to early season competition at various planting dates. In the residual herbicide study, all treatments provided similar weed control, but several residual herbicides reduced sugarbeet yield compared to non-residual herbicide treatments. Even though the weed spectrum was different in response to the sugarbeet planting date, percent yield loss due to duration of weed competition was similar for all planting dates.