

AGRONOMIC PROCEDURE

Seeding dates for winter grain trials conducted in 1982-83 were: September 13, 1982 for winter rye and winter wheat at Dickinson, September 15, 1982 for winter wheat at Hettinger and Scranton and September 16, 1982 at Beach.

At Dickinson, spring wheat variety trials were seeded on April 27, and durum, barley and oats were seeded on April 28. All nursery trials at Dickinson were planted on May 3. All crop rotation, tillage and production trials were planted May 4. Safflower and flax were seeded on May 11, corn varieties were planted May 24 and sunflower and grain sorghum trials were planted May 25.

Off station small grain variety trials were seeded at Hettinger April 22, Scranton April 25, Regent April 26, Manning April 29, Beach May 2, Beulah May 3, Hannover May 4 and Glen Ullin May 5.

All winter grain variety trials were seeded with a John Deere deep furrow drill equipped with 10 cm spear point shovels spaced 25.4 cm, and with pneumatic rubber tire packer wheels. All spring grain variety trials were seeded with a double disk press drill. No till trials were seeded with a Lilliston no-till drill. All small grain variety trials were seeded on summer fallow at the following seeding rates shown in Kg/ha: Rye 63, Winter Wheat 56, Durum, Hard Spring Wheat and Barley 67, Oats 54, Safflower 28, and Grain Sorghum 28. Hybrid sunflowers were overplanted and thinned to a uniform population of 18000 plants per acre. Corn was thinned to a uniform population of 15000 plants per acre.

A uniform pre-plant broadcast application of 23 kg Nitrogen per acre and a drill application at seeding of 4 kg Nitrogen and 10.5 kg Phosphoric Acid per acre was made on all small grain variety trials at all locations in 1983. Fertilizer application on corn was based on a shelled corn yield goal of 5000 kg/ha. Application on sunflower was based on a yield goal of 2240 kg/ha.

Hoelon and bromoxynil were used as a tank mix at all locations for wild oats and broadleaf weed control in small grains. Weed control in sunflower was accomplished with Treflan and a Banvel-Lasso tank mixture was used on corn at recommended rates.