

**Response of Hard Red Spring Wheat, Barley,
Durum, and Oats to Carolina Dakota Seed Coating
1984-1985-1986**

Carolina-Dakota seed coating is a material composed of starch based water absorbant material and graphite which is dusted on and adheres to seed. The coating has a high affinity for water, drawing it from the soil to concentrate it around the seed. It is claimed that this promotes germination and stand establishment in small grains, especially under dry soil conditions resulting in increased yields.

In addition to trials at Dickinson the material has been tested at Hettinger, Williston, Minot and Carrington Branch Stations. Data from these tests generally do not show yield increases for treated seed. Data from the 1986 trial at the Dickinson Branch Station are summarized in Table 48. See Annual Reports for 1984 and 1985 for data from previous research.

Table 48. Cardak Seed Coating, Dickinson 1986

Crop	N Lbs./A	Cardak +/-	Bu/A Avg.	Test Wt. Lbs.
Marshall Wheat	0	-	45.5	58.5
Marshall Wheat	0	+	47.7	59.5
Marshall Wheat	50	-	46.9	58.0
Marshall Wheat	50	+	43.6	58.0
Steele Oats	0	-	117.8	36.5
Steele Oats	0	+	120.8	36.5
Steele Oats	50	-	113.6	36.1
Steele Oats	50	+	120.5	36.8
Azure Barley	0	-	58.6	43.4
Azure Barley	0	+	59.6	43.4
Azure Barley	50	-	55.1	42.3
Azure Barley	50	+	53.9	42.4

There was no significant change in yield due to either the Cardak seed coating or the Nitrogen treatment.