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Evaluation of the strobilurin fungicide Amistar 80WG for the control of Rhizoctonia root rot in radishes, 2004.

The experiment was conducted at the Ohio Agricultural Research and Development Center Muck Crops Agricultural Research Station in Celeryville, OH. Fertilizer (17-17-17, 500 lb/A) was incorporated into the field on 27 Apr. Plots were disked, leveled, compacted and radishes (cv. Cabernet) were direct seeded at a rate of 12 seeds/ft on 24 Aug. Treatments were arranged in a randomized complete block design with four replications. Each plot consisted of three 20 ft rows with 18 in. between rows. In-furrow treatments of Amistar 80WG (0.13 oz/1000 row ft) were applied at seeding using a Stan-Hay vacuum seeder (24.4 gal/A, 35 psi). Dual II Magnum (1.5 pt/A) was applied on 24 Aug for weed control. Overhead irrigation (0.4 in.) was applied on 25 Aug. Post emergence treatments of Amistar 80WG (3.9 oz/A) were applied on 2 Sep using a tractor mounted 3.5 hp Honda motor-driven sprayer (46.5 gal/A, 40 psi). Radishes were harvested from a 10 ft section of the center row for each treatment on 20 Sep and numbers of healthy radishes, radishes with Rhizoctonia root and hypocotyl rot symptoms, and culls were recorded. Data were analyzed by ANOVA using SAS statistical software and means were separated using Fisher's protected least significant difference test. Average maximum temperatures for 24-31 Aug and 1-20 Sep were 80.8 and 77.9 °F; minimum averages were 62.6 and 55.6 °F and rainfall was 2.0 and 1.2 in., respectively.

Rhizoctonia disease pressure was low. All of the radishes harvested had clubroot symptoms and were considered non-marketable. There were no significant differences among the Amistar 80WG treatments in controlling Rhizoctonia root rot compared to the untreated control.

Amistar 80WG treatment	% Rhizoctonia root rot
Untreated	2.4 a*
In-furrow	1.8 a
Post emergence	1.9 a
In-furrow and post emergence	2.7 a

Values are the means of four replicate plots; means followed by the same letter within a column are not significantly different at p = 0.05.