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Field evaluation of fungicides for management of rust on dry edible (pinto) beans

Carrington, ND (2010) ■ 30-inch row spacing

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KEY FINDINGS:

The QoI (FRAC 11 / strobilurin) fungicides Headline (pyraclostrobin) **and Quadris** (azoxystrobin) **and the DMI (FRAC 3) fungicides Proline** (prothioconazole), **Tebuzol** (tebuconazole), **and Quash** (metconazole) **provided excellent control of rust.** All of the fungicides in these exhibited similar efficacy against rust in this trial.

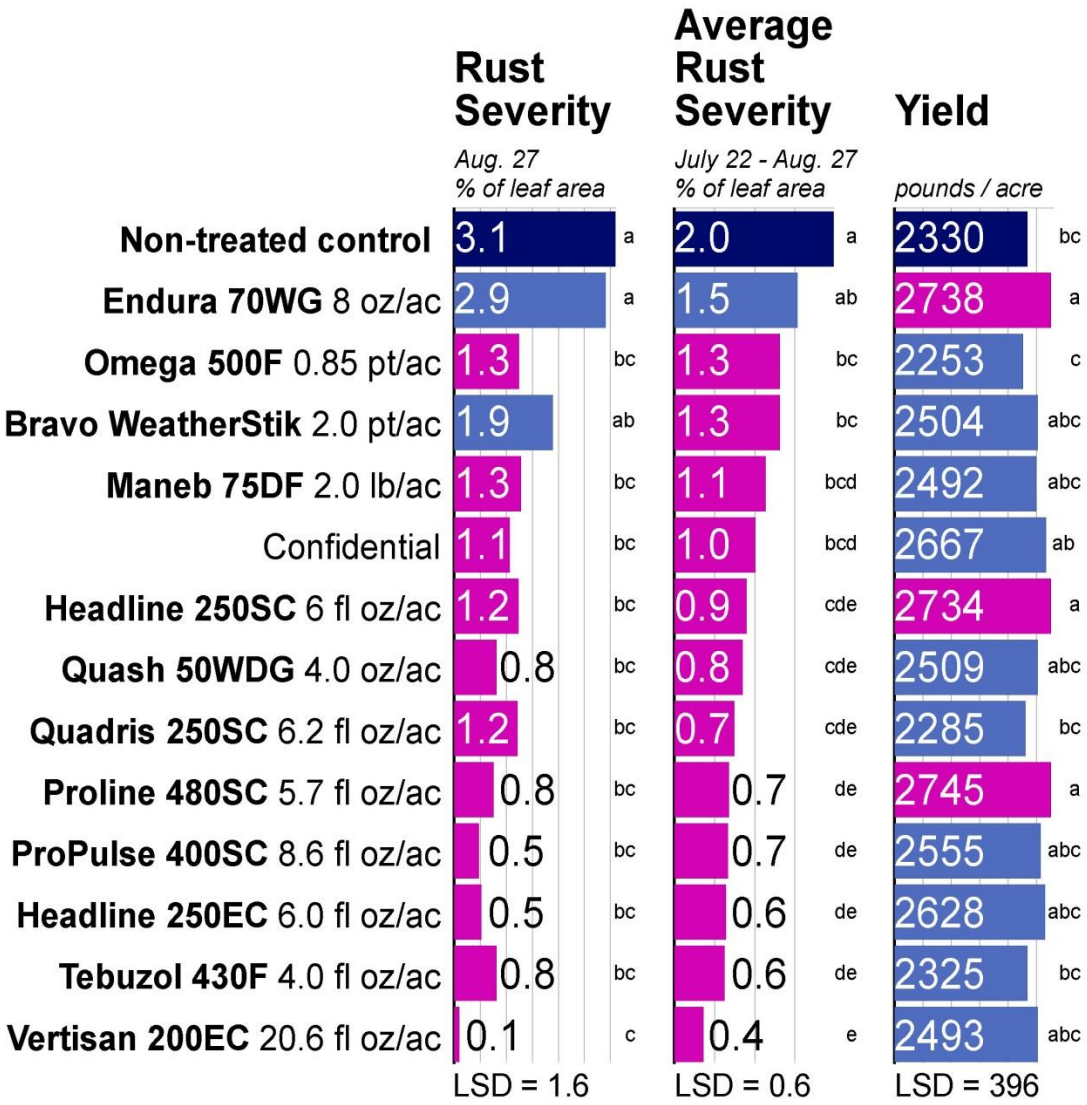
SUMMARY OF KEY RESULTS:

Within-column means followed by different letters are significantly different ($P < 0.05$; Fisher's protected least significant difference).

Fungicide application timing: July 30 (R5 growth stage; at least one pod per plant with fully developed seeds)

Fungicide application methods: Fungicides were applied with 80015VS flat-fan nozzles at 35 psi in 17.5 gal. water/ac.

Agronomics and disease establishment: Conventional tillage was used, and experimental design was a randomized complete block with four replicates. Plots were 5 ft x 19 ft with two rows spaced 30 inches apart, and non-treated buffer plots separated treatment plots. The pinto bean GTS-900 was seeded at 80,000 pure live seeds/ac on May 26 and harvested Sept. 16. The dry beans were inoculated on with greenhouse-produced rust spores on July 6.



IMPORTANT NOTICE:

- Fungicide performance can differ in response to which diseases are present, levels of disease when products are applied, environmental conditions, plant architecture and the susceptibility to disease of the variety planted, crop growth stage at the time of fungicide application, and other factors.
- This report summarizes fungicide performance as tested at the NDSU Carrington Research Extension Center in 2010 under the conditions partially summarized above.
- Fungicide efficacy may differ under other conditions; when choosing fungicides, always evaluate results from multiple trials.
- This report is shared for educational purposes and is not an endorsement of any specific products.