Brassica Rapa Type Winter Canola Varieties in East-Central Washington

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The drylands of east-central Washington often present a high-stress environment for winter crops, including winter canola, due to dry seed-zone conditions for planting in late summer, cold winters, meager precipitation, and frequent early onset of high temperatures in late spring. The Brassica napus type of winter canola has high yield potential and is generally considered the most promising domestically-produced oilseed feedstock for biodiesel production in the Inland Pacific Northwest. Most breeding and agronomy research has been conducted for B. napus varieties. Another type of winter canola, Brassica rapa, was bred in Sweden for tolerance to cold and other abiotic stresses. The downside to B. rapa winter canola is lower yield potential compared to B. napus types. However, “optimum” yield potential is often not realized in east-central Washington due to the above-mentioned stresses. The upside to B. Rapa winter canola is excellent winter hardiness, early maturity to better avoid high temperatures during flowering, and limited pod shatter. Also, deer do not eat B. rapa canola. We are growing the B. Rapa winter canola variety “Largo” in a long-term cropping systems study at the Ron Jirava farm near Ritzville, WA.

A Survey of Blackleg Disease of Canola Caused by Leptosphaeria maculans in Northern Idaho

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Blackleg (also known as stem canker, or Phoma stem canker) is the most damaging disease of Brassica crops and causes annual yield losses of more than $900 million in Europe, North America, and Australia. Blackleg can cause yield losses of up to 80%; therefore, resistance to blackleg disease has been one of the major objectives of many Brassica breeding programs.