Field Crop Report

Ontario

Canola/Edible Beans: Brian Hall

Canola

Canola acreage decreased by 35% from 2012 acres to 17,600 ha (44,000 acres). The 2013 growing season was characterized by a wet spring, dry conditions during flowering in many areas, and wet fall conditions which delayed harvest. High swede midge and flea beetle populations were very difficult to control, and had the greatest impact on stands and final yields. Yields were highly variable depending on pest damage and rainfall amounts through pod fill. The provincial average yield reported to Agricorp is around 1900 lb/ac, but the final average is expected to be lower.

Growing Season

Rainfall amounts of 110-200% above normal in April delayed planting into May in most areas. Soil conditions were generally ideal in early May, but some areas were dry leading to spotty emergence. Heavy rains in May in some areas resulted in significant soil erosion, crusting, uneven emergence and reduced stands. The wet spring was followed by dry weather in June and early July. Canola that was flowering or in early pod fill at this time took the biggest hit on yield. Flowering often lasted only 2 weeks.

Pest Management Issues

Sclerotinia pressure was low in most areas. Overwintering populations of Swede midge emerged in mid-May, earlier than normal and high populations persisted throughout the summer. Midge caused the greatest damage to stands that were attacked at the early stage, and many stands failed to recover from multiple generations of midge that followed. Early planted canola and canola that developed rapidly faired the best against swede midge, out-growing the damage in many cases. Swede midge is proving to be a formidable pest and well adapted to all growing regions in Ontario. This pest has rapidly expanded in the Temmiskiming district where damage was also very high. Control was often ineffective or variable depending on timing of control and growing conditions. Flea beetle pressure was also very high in most areas and seed treatments afforded little protection with multiple foliar controls needed in some situations. Poor control of swede midge and flea beetles was compounded by weather related crop stress.

Harvest

Uneven crop ripening and wet weather delayed harvest. Seed moisture and green seed was higher than normal, but overall quality was good. The average yield reported by Agricorp to date is 1900 lb/ac; slightly below the 10 year average. However, not all yields have been reported and the final average is expected to be lower. Swede midge damage caused the greatest yield reductions (often 25-60%).

Outlook and 2014 Plans

The canola sector continues to work towards improving an alert system for swede midge along with control options. New seed treatments in 2014 will hopefully afford better control of flea beetles. Solutions are needed to maintain canola in the rotation for soil health and crop sustainability. Canola will be a good option in select areas and fields. Canola planted reasonably early will be past the most vulnerable stage when swede midge emerge. Growers show strong interest in precision seeding and seeding rates. This is being driven largely by the relatively poor job of seed placement afforded by drills and final plant stands of only 40-60% of what was seeded.

Edible Beans

Acreage of edible beans crop decreased 20% from the 2012 acreage to about 34, 800 ha (87,000 acres). Leading the decline was white bean acreage which decreased to 17, 200 ha (43,000 acres) a 32% decrease. Coloured bean acres remained similar to previous year, with acres of cranberry increasing slightly, Japanese types helding steady while kidney and black beans decreased. Yields were highly variable, 13-22 cwt/ac typical, but the overall final yield is expected to be down. An estimated 10% of the crop remains in the field as of November 20th. Rainfall amounts of up to 200% of normal with several intense storms through June and July delayed planting and resulted in poor and uneven growth. Dry conditions in August through the southern growing region hurt yields and seed size. Crop maturity was delayed by up to 3 weeks and a wet fall delayed harvest and reduced yields and seed quality.

Growing Season

Wet weather delayed planting with only 20% of the crop planted by June 7th. Poor soil conditions and heavy rains resulted in uneven and reduced emergence, crusting and root rot issues. The slow and uneven crop development was exacerbated by intense rainfall through July with amounts totalling 110-200% of normal. By the end of July many fields were in tough shape.

Pest Management Issues

Anthracnose disease pressure in white beans was low. White mould pressure varied by rainfall amounts and timing. Delay in crop maturity, and late season showers/heavy dews resulted in an outbreak of white mould. Early leafhopper pressure needed control in many cases. Higher aphid populations in a few areas served as a vector for mosaic virus identified in several fields. A field survey of root rot in edible beans indicated high presence of both fusarium and rhizoctonia.

Harvest

The 2013 crop matured 1 to 3 weeks later than normal. Early harvest conditions were excellent through mid-September but quickly deteriorated. Frequent showers and wet soil conditions delayed harvest of the majority of the crop. Yields of white beans were often better than those of other bean types. White bean seed quality was fair to good with no anthracnose issues. Frost also impacted quality. White bean yields and quality deteriorated as harvest was delayed, but growers persisted and were encouraged to salvage as much crop as possible due to strong market demand and harvest prices. The yield and quality of large seeded coloured bean types were affected the most. The cool, wet fall slowed the speed of activity of glyphosate treatments.

Management in 2014

Wet weather, poor soil conditions, root rot and a late season outbreak of white mould were the greatest challenges in 2013. Better solutions for root rot control need to be found. Soil erosion and poor soil structure in 2013 highlight the need to explore more reduced tillage options that retain at least 30% residue cover. The best fields for edibles in 2014 will be those following forages or those where soil conditions were left in good condition following harvest.