

Pea Variety Report 2015/16

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Plant breeder, Dr. Tom Warkentin, and his team at the University of Saskatchewan's Crop Development Centre (CDC) continue to develop new pea varieties with improved yield and better agronomics.

Market Class: Yellow Pea

In the Market

CDC Meadow has been the most widely grown field pea cultivar in Saskatchewan since 2012 with **CDC Golden** in second place, according to data from the Saskatchewan Crop Insurance Corporation (SCIC). CDC Meadow has also been one of the top varieties in Alberta, Manitoba, and the northern United States. It has been popular with growers due to its consistently high yield, lodging resistance, competitiveness with weeds, and nice seed type. Breeders continue to work on new varieties with improved yield and better lodging resistance.

The next most widely grown yellow pea varieties in Saskatchewan in 2015 after CDC Meadow and CDC Golden were CDC Saffron and CDC Amarillo. Breeder seed of CDC Saffron was first released to seed growers in 2011, while breeder seed of CDC Amarillo was first released in 2012. With certified seed of these two varieties newly available in recent years, they have gained rapid adoption by growers, and area of production is expected to increase substantially in 2016.

CDC Saffron has high yield potential, good lodging resistance, and attractive medium-to-large smooth, round seeds with medium protein content and good cooking quality.

CDC Amarillo has been one of the strongest yielding varieties in registration and regional trials over the past six years. CDC Amarillo is relatively tall with one of the best lodging resistance ratings among pea varieties in Western Canada. CDC Amarillo also has good resistance to fusarium wilt. Seed weight is slightly less than that of CDC Saffron. It is round with medium protein content and good cooking quality.

Abarth yellow pea from FP Genetics provides growers with competitive yield, good disease resistance, and larger seed size. Abarth has medium maturity with very good resistance to powdery mildew, and fair resistance to *mycosphaerella* blight and fusarium wilt. It has good lodging resistance with best in class standability for ease of harvesting.

Coming soon

CDC Inca breeder seed was first released to seed growers in 2015. The key reason for releasing CDC Inca was its strong yield potential in southern Saskatchewan. CDC Inca also has good lodging resistance. It has medium seed size, round seed shape, medium protein content, and good cooking quality. Certified seed of CDC Inca should first come available in 2018.



Market Class: Green Pea

In the Market

CDC Striker was the most widely grown green pea variety in Saskatchewan for the past eight years. It has been popular with growers due to its consistently high yield, lodging resistance, and smooth, round durable seeds, which have excellent bleaching resistance and are preferred in the market. One drawback to Striker is its susceptibility to powdery mildew.

The next most widely grown green pea varieties in Saskatchewan in 2015 were CDC Patrick, CDC Raezer, CDC Sage, and CDC Limerick. Area of production of CDC Patrick and CDC Sage declined in 2015 compared to 2014, but area of CDC Raezer and CDC Limerick increased substantially. Breeder seed of CDC Raezer was first released to seed growers in 2011, while breeder seed of CDC Limerick was first released in 2012. With certified seed of these two varieties now available, these two new releases have gained rapid adoption by growers, and area of production is expected to increase substantially in 2016.

CDC Raezer has good yield, slightly better than CDC Striker on average. CDC Raezer has good lodging resistance and is powdery mildew resistant, like most new varieties in Western Canada and has good resistance to fusarium wilt. Seed size, shape, and bleaching resistance are very similar to CDC Striker.

CDC Limerick is the highest yielding green pea variety currently on the market and has good lodging resistance. CDC Limerick has smooth, round seeds with good bleaching resistance and higher protein content than most pea varieties on the market.

Coming Soon

CDC Greenwater breeder seed was first released to seed growers in 2014. The key reason for releasing CDC Greenwater was its strong yield potential. CDC Greenwater also has good lodging resistance. It has medium seed size and round seed shape. Certified seed of CDC Greenwater should first come available in 2017.

Market Class: Dun Pea

Breeder seed of the dun pea variety **CDC Dakota** was first released in 2010 and has been one of the top yielders every year since. Dun peas have purple flowers, pigmented seed coats, and yellow cotyledons (same as yellow peas). They are dehulled and sold in human consumption markets similar to yellow pea varieties. India is the preferred market and prices are similar to yellow peas. The pigmented seed coats provide natural protection to various root rot fungi, so typically dun (and maple) pea varieties are quick to emerge with good stands. The dun market class requires additional promotion in Western Canada to reach its potential value for growers.

Market Class: Maple Pea

Maple pea varieties available in Western Canada include **CDC Acer, CDC Rocket,** and **CDC Mosaic**. CDC Acer and CDC Mosaic have small seed size, with CDC Mosaic having better lodging resistance. CDC Rocket has medium seed size and earlier maturity than CDC Acer and CDC Mosaic.



CDC 3012-1LT is a new maple pea variety with a lighter seed coat color. It has higher yield than the other maple peas, similar to CDC Meadow, and seed size similar to CDC Rocket. Certified seed of CDC 3012-1LT will become available in 2018.

Market Class: Forage Pea

CDC Tucker, CDC Leroy, and **CDC Horizon** are forage pea varieties with high biomass yield, powdery mildew resistance, good lodging resistance, and semi-leafless leaf type. These varieties produce on average four to five tonnes per acre of forage dry matter, similar to that of forage barley, but with greater protein concentration. Certified seed of all three forage pea varieties is available.