Model-based principal field crop estimates, August 31, 2015

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Model-based principal field crop estimates, which provide yield and production estimates for Canada's principal field crops, are now available.

The estimates are calculated with a new and innovative approach developed by Statistics Canada in close partnership with Agriculture and Agri-Food Canada. This method uses a model that incorporates coarse resolution satellite data from Statistics Canada's Crop Condition Assessment Program, data from Statistics Canada's Field Crop Reporting Series and agroclimatic data.

This is the first release of crop estimates produced according to this methodology. The modelled yield estimates constitute a supplemental release in advance of the September publication of the Field Crop Reporting Series.

Based on a modelling approach, production of wheat and canola at the national level (see note to readers) is estimated to be lower in 2015 than in 2014, while soybeans, corn for grain, and barley and oats are anticipated to rise over last year.

Wheat

At the national level, spring wheat production is estimated to be 18.4 million tonnes in 2015, down 13.0% from 2014. This estimated decrease in production is mainly the result of a lower estimated average yield. The average yield is anticipated to be 40.5 bushels per acre, down 11.7% from the 45.9 bushels per acre reported in 2014. The harvested acreage for 2015 is reported to have edged down 1.5% compared with 2014.

Spring wheat production is anticipated to decrease in Saskatchewan (-19.8%) and Alberta (-23.3%). Estimated average yields in Saskatchewan are anticipated to be down 14.0% compared with 2014 to 34.9 bushels per acre. In Alberta, the estimated average yield is expected to decrease 20.1% from 2014 to 41.4 bushels per acre.

In contrast, Manitoba spring wheat production is estimated to increase 26.2% in 2015. This gain was boosted by an estimated higher yield of 52.2 bushels per acre, a 7.0% increase over 2014, and a reported 18.0% increase in harvested area.

Average yields for durum wheat at the national level are estimated to decline 24.5% from 2014 to 30.9 bushels per acre. Despite much lower estimated yields, national production is estimated to decline 8.0% from 2014 to 4.8 million tonnes as a result of a 22.1% increase in reported harvested acreage in 2015.

Canola

At the national level, canola production is estimated to be 14.4 million tonnes in 2015, down 11.6% from 2014. This estimated decrease in production is a combined result of both lower average yields and anticipated harvested acreage. Estimated average yields for 2015 are down 7.2% from 2014 to 32.6 bushels per acre. Anticipated harvested acreage will be down 4.9% in 2015, another factor in the decrease in the production estimate.

Estimated average yield, reported harvested acres and production are all forecast to decrease in Saskatchewan and Alberta, two major canola-producing regions. Canola crops have been affected by a late frost in May and by drought and hot conditions for much of the growing season in the two provinces. On the other hand, increased production is anticipated in Manitoba as a result of higher estimated yields combined with a slight increase in reported harvested area.

Soybeans

At the national level, soybean production is estimated to be 5.9 million tonnes in 2015, up 2.1% from 2014 despite a reported decrease in harvested area in Quebec (-9.0%) and Ontario (-4.6%). Soybean yields are estimated to increase in all provinces in 2015. Production is anticipated to increase by 22.6% in Manitoba to 1.4 million tonnes in 2015, the result of both increased yield (+17.0% to 37.8 bushels per acre) and reported harvested acreage (+4.8% to 1.3 million acres).

Corn for grain

At the national level, corn for grain production is estimated to increase 12.5% from 2014 to 12.7 million tonnes in 2015. Corn for grain yields are estimated to increase in all provinces in 2015. Higher yields and reported harvested acreage will lead to increased production in Ontario (+13.4% to 8.6 million tonnes) and Quebec (+13.3% to 3.4 million tonnes). In Manitoba, production is estimated to decline 0.5% to 693 000 tonnes. This will be the result of an 8.2% decrease in anticipated harvested acres, which will offset an estimated yield increase of 8.4% to 121.2 bushels per acre in 2015.

Barley and oats

At the national level, barley production is estimated to increase 0.5% from 2014 to 7.0 million tonnes in 2015. An 8.1% increase in reported harvested area (5.6 million acres in total) is anticipated to offset a 7.0% decrease in estimated average yield (57.8 bushels per acre).

At the national level, oat production is estimated to increase 10.9% from 2014 to 3.2 million tonnes in 2015. The rise in production is forecast to be the result of an 18.4% increase in reported harvested acres (2.6 million acres in total), while estimated average yield is anticipated to fall 6.3% to 79.6 bushels per acre.

Note to readers

Production estimates are calculated by using the model-based yields multiplied by the reported harvested area from the July survey of the Crop Reporting Series.

The modelled yield estimates are a supplemental release to the September Farm Survey. The September survey will continue to be released by Statistics Canada as planned.

A methodology report describing the yield model used at Statistic Canada is available upon request.

For this release, national level data comprise data from Quebec, Ontario, Manitoba, Saskatchewan and Alberta.

Available in CANSIM: table 001-0075.

Definitions, data sources and methods: survey number 5225.

For more information, or to enquire about the concepts, methods or data quality of this release, contact us (toll-free 1-800-263-1136; 514-283-8300; **infostats@statcan.gc.ca**) or Media Relations (613-951-4636; **mediahotline@statcan.gc.ca**).