

## C16057Canary seed data summary

**CROP KIND:** Annual canarygrass

**TYPE:** Glabrous; yellow seed

**PROPOSER:** P. Hucl;

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**TEST NUMBERS:** C16057

**PEDIGREE:** CDC Cibo/C00038

C16057 was selected from the cross CDC Cibo/C00038 made in 2009 at the University of Saskatchewan using the approach method. The female parent CDC Cibo is the source of the yellow seed in C16057. The male parent, C00038 was selected from the cross CDC Maria/PI 284185 and is a glabrous brown seeded line. C00038 is a parent of CDC Lumio.

Individual putative F<sub>1</sub> plants were grown in the field during the summer of 2010 and screened for brown seed colour (dominant morphological marker). The F<sub>2</sub>, F<sub>3</sub> and F<sub>4</sub> generations were grown in bulk in the field in 2011, 2012 and 2013, respectively. A hill was planted to seed from a single F<sub>4</sub> panicle as an F<sub>5</sub> in 2014. C16057 is derived from a bulked F<sub>5</sub> hill which was tested in an F<sub>6</sub> yield plot in 2015. C16057 was evaluated in a replicated yield test at two sites in 2016. From 2017 to 2022, C16057 was grown in the Glabrous Canary Seed Cooperative Registration Test. C16057 is yellow-seeded and glabrous. C16057 was selected on the basis of higher grain yield.

**AREA OF ADAPTATION:** Annual canarygrass growing regions of western Canada.

**STRENGTHS:** Increased yield compared to the glabrous canary seed checks.

**WEAKNESSES:**

**DESCRIPTION:** C16057 is a glabrous annual canarygrass line that yielded, on average, 16.5 % higher than CDC Bastia, 15.1% higher than CDC Calvi and 10.4 % higher than the yellow-seeded variety CDC Cibo over 24 trials in a five year period (Table 1) in Saskatchewan. C16057 is similar to CDC Lumio in regards to grain yield.

C16057 is a day later heading than CDC Cibo but is otherwise similar in regards to maturity, height, test weight and seed weight. (Table 1).

In SVPG trials conducted in 2021 and 2022 (nine trials in total), C16057 yielded 9.6% less than Keet (pubescent cultivar) and the same as Cantate (pubescent cultivar).

| <b>Glabrous canaryseed Registration Test: 2017-2022 Summary Table</b> |              |                 |                |                 |               |                 |                 |             |
|---|--------------|-----------------|----------------|-----------------|---------------|-----------------|-----------------|-------------|
|   | <b>Yield</b> |                 | <b>Heading</b> | <b>Maturity</b> | <b>Height</b> | <b>Test wt.</b> | <b>Seed wt.</b> |             |
| <b>name</b>   | <b>kg/ha</b> | <b>% Bastia</b> | <b>days</b>    | <b>days</b>     | <b>cm</b>     | <b>kg/hL</b>    | <b>mg</b>       | <b>seed</b> |
| CDC Bastia  | 1531         | 100.0           | 53.4           | 96.8            | 85.9          | 71.2            | 8.1             | GB          |
| CDC Calvi   | 1548         | 101.1           | 53.6           | 98.1            | 87.7          | 71.7            | 8.4             | GB          |
| CDC Cibo  | 1615         | 105.5           | 53.2           | 97.2            | 77.8          | 71.1            | 8.2             | GY          |
| CDC Lumio   | 1768         | 115.5           | 54.3           | 97.2            | 86.0          | 70.7            | 8.5             | GB          |
| C16057  | 1783         | 116.5           | 54.5           | 97.5            | 77.9          | 71.2            | 8.1             | GY          |
| <b>no. of Station-Years</b>   | <b>24</b>    |                 | <b>20</b>      | <b>23</b>       | <b>21</b>     | <b>20</b>       | <b>20</b>       |             |