

**UNDERSTANDING THE VALUE OF NEXERA\* CANOLA MEGAPLOTS:**

**WHY DOES DOW AGROSCIENCES USE MEGAPLOTS FOR VARIETY TESTING?**



**1. THE RIGHT SIZE PLOTS FOR ACCURATE VARIETY EVALUATION**

- Megaplots are a minimum of 5 metres wide x 15 metres long for each variety in each replicate, which more accurately reflects real world farming practices than very small plots used for variety registration.
- Megaplots are replicated 3 to 4 times to provide scientifically validated data that can be analyzed statistically.
  - Small plot trials (1.5 metres x 5 metres) can result in skewed data because results may depend solely on where the variety was placed in the plot, rather than the actual varietal performance. Often a missing plant, thin row or edge effect may be over-represented in the data because of small plot size.
  - Co-efficients of variability (C.V.) which represent performance variability, are often higher due to very small plot size and limited growing area.
  - Strip trials can offer good comparisons between strips, but results can be skewed if one strip falls in an atypical part of the field.
  - Field scale trials can represent the full diversity of a field, but differences between fields can make true variety comparisons difficult.

**2. QUALIFIED COOPERATORS AND DATA MANAGEMENT**

- All Dow AgroSciences megaplots are managed and evaluated by competent research organizations, including Dow AgroSciences Product Technology Specialists and qualified, reliable third party research organizations, both government and private.
- All megaplot data is subject to stringent statistical analysis and review by Dow AgroSciences technical and commercial personnel as well as qualified third party experts.
- All data is shared whether Nexera canola wins, loses or ties with competitive varieties for yield and agronomic performance.
- All Nexera canola varieties are tested for quality and oil profile to ensure they will meet oil quality specifications.

### **3. GEOGRAPHICAL COVERAGE ACROSS WESTERN CANADA**

- Megaplots are placed across western Canada in areas that reflect typical growing areas for canola.
- Megaplots are tested in each of the short, mid- and long-season zones across all provinces to provide relevant data for each growing zone.
- Strict site criteria are used to select sites that have the right set of conditions to provide the most accurate, reliable varietal performance data possible.

### **4. THE RIGHT MANAGEMENT – SEED, FERTILIZER, HERBICIDE AND AGRONOMIC PRACTICE**

- All seed used in megaplots is from commercial lots and is the same seed that growers plant.
- Megaplot fertility programs are based on soil tests for a typical input regime, similar to grower fertility programs.
- All herbicide tolerant varieties are sprayed with their respective herbicide products; i.e. Roundup Ready®, CLEARFIELD® and LibertyLink®.
- To ensure accurate quality measurements, all megaplots are either swathed or desiccated at the time the variety is mature or is finished turning colour.
- All megaplots are harvested as soon as possible when ready, to maximize quality and to minimize pod shatter and seed loss.