

Technical Bulletin

Genes that fit *your* farm.

SeCan

Canada's Seed Partner

Esma 2-Row Barley



Esma is an exciting new 2-row barley with exceptionally short strong straw and high grain yield potential. Esma is ideally suited to high moisture and high fertility growing conditions of Western Canada. Esma was registered in Ontario as a malt variety but in Western Canada it fits best as a feed barley as it's malt profile does not match our normal western malt varieties.

Strengths:

- Yield 129% of AC Metcalfe and 109% of AAC Synergy (2018 & 2019 Ontario Orthogonal Registration Trials)
- 105% of CDC Austenson in SeCan western Canadian EuroBarley trials in 2017 and 2019
- Approximately 14cm shorter than CDC Austenson in SeCan western Canadian EuroBarley trials
- Very good lodging rating, in SeCan western EuroBarley trials Esma rated 1.3 vs 2.7 for CDC Austenson on a 1 to 9 scale where 1 = no lodging and 9 = flat

Neutral Traits:

- Slightly lower bushel weight compared to Canadian check varieties
- similar maturity to CDC Austenson
- Intermediate resistance to spot blotch

Weaknesses:

- Susceptible disease resistance rating to FHB and stem rust

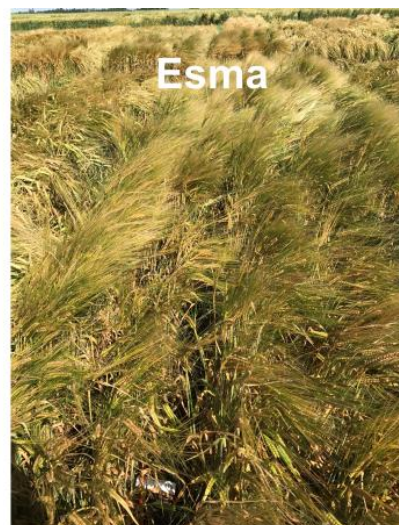
Breeder:

Ackermann Saatzucht GmbH & Co. KG,
Irlbach, Germany

PBR 91 Protected
PVP Granted

VUA™

Pictures taken in August 2017 at Bon Accord, AB



For more information, call 1-800-665-7333 or visit www.secan.com

Seed Manitoba 2024 - Barley Comparison

| Variety | Site Years Tested | Yield bu/ac | Protein % | Relative Maturity +/- 88 days | Height +/- 89cm | Test Weight +/- 48.7lb/bu | Rough or Smooth Awns | Lodging | Loose Smut | Surface Borne Smut | Root Rot | Netted Net Blotch | Spotted Net Blotch | Spot Blotch | Stem Rust | FHB |
|-----------------------------|-------------------|-------------|-------------|-------------------------------|-----------------|---------------------------|----------------------|----------|------------|--------------------|-----------|-------------------|--------------------|-------------|-----------|-----------|
| AB Advantage (6R) | 30 | 109 | 13.3 | +1 | +15 | 0 | S | VG | MR | I | --- | MS | I | I | I | S |
| AB Tofield (6R) | 29 | 111 | 12.2 | +1 | +5 | +1 | S | VG | MR | MR | --- | MS | I | I | R | S |
| CDC Austenson (2R) | 79 | 116 | 12.3 | +1 | 0 | +0.5 | R | G | S | R | I | MS | R | MR | I | I |
| CDC Churchill (2R)* | 41 | 114 | 12.3 | +1 | -5 | -0.2 | R | G | MS | MR | --- | MR | MR | I | MR | MS |
| CDC Durango (2R) | 29 | 114 | 12.5 | +2 | -3 | +0.1 | R | G | S | R | --- | MR | MS | I | I | I |
| CDC Renegade (2R) | 29 | 107 | 12.7 | +1 | +7 | -0.3 | S | F | I | MR | --- | MS | MR | MS | MR | MR |
| KWS Kellie (2R) VUA | 29 | 106 | 12.1 | 1 | -11 | -1.5 | --- | P | NT | NT | NT | NT | NT | NT | NT | NT |
| Esma (2R) VUA | 30 | 115 | 12.2 | +1 | -10 | -0.4 | --- | G | NT | NT | NT | NT | NT | NT | NT | NT |

Lodging Ratings: F=Fair; G=Good; VG=Very Good Disease Ratings: R=Resistant; MR=Moderately Resistant; I=Intermediate; MS=Moderately Susceptible; S=Susceptible, NT = Not tested

2024 Saskatchewan Varieties of Grain - Barley Comparison

| Variety | Years Tested | # Rows | Awn Type | Yield (% of AAC Synergy) | | Relative Maturity | Lodging | Net Form Net Blotch | Spot-Form Net Blotch | Spot Blotch | Scald | Loose Smut | Other Smuts | Root Rot | Stem Rust | FHB |
|------------------------|--------------|----------|----------|--------------------------|------------|-------------------|----------|---------------------|----------------------|-------------|------------|------------|-------------|------------|------------|------------|
| | | | | Area 1&2 | Area 3&4 | | | | | | | | | | | |
| AAC Synergy | 7 | 2 | R | 100 | 100 | M | F | MR | R | R | S | S | I | I | MR | I |
| AB Advantage | 7 | 6 | S | 103 | 100 | VL | VG | MS | I | I | I | MR | I | --- | I | S |
| AB Tofield | 6 | 6 | S | 106 | 105 | L | G | MS | I | I | I | --- | MR | --- | R | S |
| CDC Austenson | 7 | 2 | R | 102 | 103 | M | G | MS | R | MR | S | S | R | I | I | I |
| CDC Churchill* | 7 | 2 | R | 105 | 104 | M | G | MR | MR | I | S | MS | MR | --- | MR | MS |
| CDC Durango | 5 | 2 | R | 107 | 107 | M | VG | MR | MS | I | MS | S | MR | --- | I | I |
| CDC Renegade | 4 | 2 | S | 107 | 97 | M | F | I | MR | MS | S | MS | MR | --- | MR | MR |
| KWS Kellie VUA | 4 | 2 | R | 107 | 98 | L | G | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Esma VUA | 4 | 2 | R | 106 | 100 | M | G | --- | --- | --- | --- | --- | --- | --- | --- | --- |

M=Medium; L=Late; F=Fair; G=Good; VG=Very Good; P=Poor; VP=Very Poor Disease Ratings: R=Resistant; MR=Moderately Resistant; I=Intermediate; MS=Moderately Susceptible; S=Susceptible

2024 Alberta Seed Guide – Feed and Food Barley Comparison

| Variety | 2 or 6 Row | Awn Type | Most Recent Year of Testing | Station Years | Yield % AAC Synergy | | | Maturity Days +/- AAC Synergy | Test Weight lb/bu | TKW (g) | Height (cm) | Resistance to Lodging | Disease Tolerance | | | | | | |
|----------------------------|------------|----------|-----------------------------|---------------|---------------------|------------------|-------------------|-------------------------------|-------------------|-----------|-------------|-----------------------|-------------------|-------------|-----------|----------------------|---------------------|-------------|-----------|
| | | | | | Overall Yield | Low <113 (bu/ac) | High >113 (bu/ac) | | | | | | Loose Smut | Other Smuts | Scald | Spot Form Net blotch | Net Form Net Blotch | Spot Blotch | FHB |
| AAC Synergy (bu/ac) | | | | | 124 | 86 | 146 | 93 | | | | | | | | | | | |
| AAC Synergy | 2 | R | 2023 | 131 | 100 | 100 | 100 | 0 | 53 | 49 | 81 | F | S | I | S | R | MR | R | I |
| AB Advantage | 6 | S | 2020 | 32 | 104 | 100 | 106 | +2 | 52 | 48 | 102 | G | MR | I | I | I | MS | I | S |
| AB Tofield | 6 | S | 2021 | 24 | 104 | 102 | 105 | +1 | 52 | 43 | 84 | G | MR | MR | I | I | MS | I | S |
| CDC Austenson | 2 | R | 2023 | 101 | 100 | 94 | 103 | +2 | 54 | 49 | 81 | G | S | R | S | R | MS | MR | I |
| CDC Churchill* | 2 | R | 2023 | 42 | 103 | 101 | 104 | +2 | 53 | 46 | 77 | G | MS | MR | S | MR | MR | I | MS |
| CDC Durango | 2 | R | 2023 | 41 | 106 | 98 | 109 | +2 | 54 | 50 | 79 | VG | S | R | MS | MS | MR | I | I |
| CDC Renegade | 2 | S | 2022 | 26 | 102 | 109 | 97 | +4 | 52 | 52 | 90 | F | I | MR | S | MR | I | MS | MR |
| KWS Kellie VUA | 2 | R | 2022 | 26 | 114 | 121 | 110 | +5 | 52 | 50 | 66 | VG | NT | NT | NT | NT | NT | NT | NT |
| Esma VUA | 2 | R | 2022 | 26 | 110 | 114 | 107 | +3 | 52 | 51 | 69 | VG | NT | NT | NT | NT | NT | NT | NT |

R=Rough; VG=Very Good, G=Good, F=Fair; P=Poor; VP=Very Poor; Disease Ratings: R=Resistant; MR=Moderately Resistant; I=Intermediate; MS=Moderately Susceptible; S=Susceptible, NT = Not tested

*Malting barley for comparison

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