

**NDSU Langdon Research Extension Center**  
**2012 Hybrid Trial Data**

| Oil Sunflower - 2012 (page 1) |  |  |  |  |  |  |  |  |  |  | Langdon |
|-------------------------------|--|--|--|--|--|--|--|--|--|--|---------|
|-------------------------------|--|--|--|--|--|--|--|--|--|--|---------|

| Brand   | Hybrid    | Hybrid Type <sup>1</sup> | Status <sup>2</sup> | Days to Flower | Plant Height | Oil <sup>3</sup> (%) | Test Weight (lb/bu) | Yield @ 10% moisture |      |      |      | Average (lbs/a)<br>2yr<br>3yr |
|---------|-----------|--------------------------|---------------------|----------------|--------------|----------------------|---------------------|----------------------|------|------|------|-------------------------------|
|         |           |                          |                     |                |              |                      |                     | 2010                 | 2011 | 2012 |      |                               |
| Croplan | 460 E     | NS,EX                    | CA                  | 79             | 69           | 49.6                 | 31.1                | 1777                 | 1682 | 1836 | 1759 | 1765                          |
| Croplan | 432 E     | NS,EX,DMR                | CA                  | 76             | 67           | 46.6                 | 33.1                | --                   | --   | 2184 | --   | --                            |
| Croplan | 548 CL    | NS,CL,DMR                | CA                  | 79             | 63           | 44.4                 | 29.0                | --                   | 1641 | 1377 | 1509 | --                            |
| Croplan | 559 CL    | NS,CL,DMR                | CA                  | 79             | 68           | 49.4                 | 31.7                | 2397                 | 1440 | 1769 | 1604 | 1869                          |
| Genosys | 11G04     | HO                       | CA                  | 80             | 67           | 46.8                 | 33.3                | --                   | --   | 1407 | --   | --                            |
| Genosys | 11G08     | NS                       | CA                  | 79             | 67           | 48.0                 | 32.1                | --                   | --   | 1642 | --   | --                            |
| Genosys | 11G12     | HO,CL                    | CA                  | 79             | 66           | 47.1                 | 35.0                | --                   | --   | 1574 | --   | --                            |
| Genosys | 11G13     | NS,CL                    | CA                  | 80             | 67           | 42.8                 | 30.9                | --                   | --   | 1674 | --   | --                            |
| Genosys | 12E12     | HO,CL                    | CA                  | 79             | 73           | 42.0                 | 29.7                | --                   | --   | 1421 | --   | --                            |
| Genosys | 12E13     | HO,CL                    | CA                  | 78             | 68           | 44.3                 | 28.9                | --                   | --   | 1989 | --   | --                            |
| Genosys | 12E14     | HO,CL                    | CA                  | 80             | 71           | 46.1                 | 27.9                | --                   | --   | 1521 | --   | --                            |
| Mycogen | 8N270CLDM | NS,CL,DMR                | CA                  | 76             | 66           | 48.3                 | 31.6                | 2265                 | 1975 | 1781 | 1878 | 2007                          |
| Mycogen | 8N358CLDM | NS,CL,DMR                | CA                  | 78             | 62           | 49.3                 | 31.0                | 1961                 | 1723 | 1522 | 1623 | 1735                          |
| Mycogen | 8H449CLDM | HO,CL,DMR                | CA                  | 80             | 63           | 48.7                 | 32.6                | --                   | --   | 1689 | --   | --                            |
| Mycogen | 8H288CLDM | HO,CL,DMR                | CA                  | 77             | 66           | 47.5                 | 31.4                | 2060                 | 1512 | 1518 | 1515 | 1697                          |
| Mycogen | 8D310     | NS                       | CA                  | 79             | 68           | 43.4                 | 30.6                | 2100                 | 1776 | 1577 | 1677 | 1818                          |
| Pioneer | P63ME70   | NS,EX,DMR                | CA                  | 77             | 66           | 45.8                 | 27.6                | 1889                 | 1902 | 1997 | 1949 | 1929                          |
| Pioneer | P63ME80   | NS,EX,DMR                | CA                  | 77             | 67           | 47.4                 | 32.2                | --                   | 1754 | 1706 | 1730 | --                            |
| Pioneer | P64HE01   | HO,EX,DMR                | CA                  | 78             | 62           | 45.6                 | 33.7                | 2139                 | 1560 | 1454 | 1507 | 1718                          |
| Pioneer | P63HE60   | HO,EX,DMR                | CA                  | 77             | 67           | 45.9                 | 32.8                | --                   | 2125 | 1755 | 1940 | --                            |
| Proseed | E-85      | HO,DMR                   | CA                  | 78             | 69           | 44.0                 | 28.5                | --                   | --   | 1577 | --   | --                            |
| Proseed | CL E-21   | HO,CL,DMR                | CA                  | 80             | 71           | 43.4                 | 29.5                | --                   | --   | 1512 | --   | --                            |
| Proseed | CL E-23   | Trad,CL,DMR              | CA                  | 81             | 74           | 48.6                 | 33.4                | --                   | --   | 1635 | --   | --                            |
| Proseed | CL 8001   | NS,CL                    | CA                  | 79             | 63           | 46.8                 | 31.2                | --                   | --   | 1821 | --   | --                            |
| Proseed | CL 7001   | NS,CL                    | CA                  | 80             | 69           | 47.8                 | 30.8                | --                   | --   | 1879 | --   | --                            |
| Proseed | E-362436  | HO,DMR                   | CA                  | 79             | 77           | 47.7                 | 33.2                | --                   | --   | 1989 | --   | --                            |
| Proseed | E-34 CL   | Trad,CL,DMR              | CA                  | 77             | 70           | 49.0                 | 28.7                | --                   | --   | 1670 | --   | --                            |

| Brand            | Hybrid                 | Hybrid Type <sup>1</sup> | Status <sup>2</sup> | Days to Flower | Plant Height | Oil <sup>3</sup> (%) | Test Weight (lb/bu) | Yield          |      |      |         |      |
|------------------|------------------------|--------------------------|---------------------|----------------|--------------|----------------------|---------------------|----------------|------|------|---------|------|
|                  |                        |                          |                     |                |              |                      |                     | @ 10% moisture |      |      | Average |      |
|                  |                        |                          |                     | (days)         | (inch)       | (%)                  | (lb/bu)             | 2010           | 2011 | 2012 | 2yr     | 3yr  |
| Seeds 2000       | Falcon                 | NS,EX                    | CA                  | 80             | 66           | 48.8                 | 32.1                | --             | 1279 | 1626 | 1453    | --   |
| Seeds 2000       | Camaro II              | NS,CL,DMR                | CA                  | 79             | 66           | 50.0                 | 31.9                | --             | --   | 2160 | --      | --   |
| Seeds 2000       | Cobalt II              | HO,CL,DMR                | CA                  | 76             | 60           | 46.3                 | 32.0                | --             | --   | 1918 | --      | --   |
| Seeds 2000       | Defender Plus          | NS,DMR                   | CA                  | 80             | 60           | 46.6                 | 31.8                | 1948           | 1715 | 1620 | 1668    | 1761 |
| SunOpta/Dahlgren | 4421                   | NS                       | CA                  | 79             | 64           | 43.4                 | 31.2                | --             | --   | 1733 | --      | --   |
| Syngenta         | 7120 HO/DM             | HO,DMR                   | CA                  | 77             | 62           | 45.9                 | 31.4                | 1836           | 1513 | 1748 | 1630    | 1699 |
| Syngenta         | NX24121                | HO,CL,DMR                | Exp                 | 74             | 61           | 44.3                 | 33.1                | --             | --   | 1808 | --      | --   |
| Syngenta         | NX24122                | HO,CL,DMR                | Exp                 | 80             | 65           | 44.8                 | 29.4                | --             | --   | 1497 | --      | --   |
| Syngenta         | NX24123                | HO,CL,DMR                | Exp                 | 78             | 64           | 47.6                 | 29.8                | --             | --   | 1896 | --      | --   |
| Syngenta         | 3495 NS/CL/DM          | NS,CL,DMR                | CA                  | 80             | 69           | 47.4                 | 31.7                | --             | 2175 | 1997 | 2086    | --   |
| Syngenta         | 3158 NS/CL/DM          | NS,CL,DMR                | CA                  | 79             | 58           | 47.6                 | 32.8                | --             | --   | 1406 | --      | --   |
| Syngenta         | 3990 NS/CL/DM          | NS,CL,DMR                | CA                  | 80             | 65           | 50.0                 | 31.9                | --             | 2412 | 2137 | 2275    | --   |
| Syngenta         | 3733 NS/DM             | NS,DMR                   | CA                  | 79             | 67           | 46.6                 | 30.5                | --             | 1768 | 1990 | 1879    | --   |
| Syngenta         | 3733 NS/DM Pelleted    | NS,DMR                   | CA                  | 80             | 66           | 47.8                 | 32.1                | --             | 2168 | 1546 | 1857    | --   |
| Syngenta         | 3995 NS/SU             | NS,EX,DMR                | Exp                 | 79             | 66           | 45.1                 | 32.4                | --             | 1258 | 1552 | 1405    | --   |
| Syngenta         | 3158 NS/CL/DM Pelleted | NS,CL,DMR                | CA                  | 78             | 61           | 47.0                 | 32.3                | --             | --   | 1927 | --      | --   |
| Syngenta         | 3845 HO                | HO,DMR                   | CA                  | 81             | 64           | 47.3                 | 31.1                | --             | 1428 | 1455 | 1442    | --   |
| USDA             | 894                    | Trad                     | CK                  | 77             | 64           | 48.2                 | 31.4                | 1948           | 1288 | 1663 | 1476    | 1633 |
| Trial Mean       |                        |                          |                     | 79             | 66           | 46.6                 | 31.4                | 1934           | 1768 | 1723 | --      | --   |
| C.V. %           |                        |                          |                     | 1.6            | 5.4          | 2.4                  | 3.0                 | 17.9           | 15.6 | 16.5 | --      | --   |
| LSD 10%          |                        |                          |                     | 1.7            | 4.8          | 1.5                  | 1.3                 | --             | --   | 386  | --      | --   |
| LSD 5%           |                        |                          |                     | 2.0            | 5.7          | 1.8                  | 1.6                 | 562            | 449  | 462  | --      | --   |

<sup>1</sup>Type: HO = High Oleic, NS = NuSun, Trad = Traditional, CL = Clearfield, EX= Express, DMR = Downy Mildew Resistant.

NA=Information not provided.

<sup>2</sup>Status: CA-Commercially available, EXP-Experimental, CK-Long term hybrid check

<sup>3</sup>Oils were adjusted to 10% moisture. Oil % of NuSun and Traditional hybrids were adjusted for oil type.

Planting Date: May 16

Harvest Date: October 2

Maturity Checks: Falcon, 8N270, 559CL