

disease damage. Associated wild species: *Cirsium*, *Medicago*, *Solidago*, *Aster*.

PI 592337. *Helianthus maximilianii* Schrader

Wild. MAX-2335; Ames 22203. Collected 09/14/1994 in Manitoba, Canada. Latitude 49 deg. 39' 28'' N. Longitude 99 deg. 45' 27'' W. Elevation 392 m. 6.0 km west of Wawanesa, Hwy. 344 W. Black-brown, sandy-loam soil, level area of roadside ditch, topography - plain (level), moderate soil nutrient content, no salinity, moderate to well drained, tillage not affected by stoniness. Cropland vegetation. Population extending for several hundred meters in roadside ditch, population about 12 m wide. Uniform population. Typical *H. maximilianii* but with mostly single-headed plants. Past peak flowering, good seed set. No apparent insect or disease damage. Associated wild species: *Cirsium*, *Solidago*, *Melilotus*.

PI 592338. *Helianthus maximilianii* Schrader

Wild. MAX-2337; Ames 22204. Collected 09/14/1994 in Manitoba, Canada. Latitude 49 deg. 5' 20'' N. Longitude 99 deg. 17' 22'' W. Elevation 303 m. 4.3 km east of Cartwright, Hwy. 3 E. Black-brown, sandy-loam soil, level area of roadside ditch, topography - plain (level), moderate soil nutrient content, no salinity, imperfect to moderate drainage, tillage not affected by stoniness. Cropland vegetation. Large, scattered population along both sides of road in roadside ditch. Uniform population. Few larger flowering plants on back slope of ditch. Most plants past flowering, good seed set. Some heads clippered off, several plants with some rust. Associated wild species: *Cirsium*, *Solidago*, *Aster*.

PI 592339. *Helianthus maximilianii* Schrader

Wild. MAX-2339; Ames 22206. Collected 09/14/1994 in Manitoba, Canada. Latitude 49 deg. 44' 18'' N. Longitude 97 deg. 50' 12'' W. Elevation 256 m. 14.4 km northeast of Elm Creek, Hwy. 2 E. Black-brown, clay, silt soil, level area of roadside ditch, topography - plain (level), moderate soil nutrient content, no salinity, imperfect to moderate drainage, tillage not affected by stoniness. Cropland and grassland vegetation. Large population along both sides of road in roadside ditch. Uniform population, effective population size - several hundred plants. Plants more robust than previously seen, more typical *H. maximilianii*. Just past peak flowering, very good seed set. Sunflower beetle on heads, some heads clippered off, many plants with moderate rust. Associated wild species: *Carduus*, *Cirsium*, *Aster*, *Solidago*.

The following were collected by Gerald Seiler, USDA, ARS, Northern Crop Science Lab., P.O. Box 5677, University Station, Fargo, North Dakota 58105, United States. Received 09/16/1994.

PI 592340. *Helianthus nuttallii* Torrey & A. Gray

Wild. MAX-2281; Ames 22195. Collected 09/03/1994 in Manitoba, Canada. Latitude 49 deg. 22' 13'' N. Longitude 98 deg. 17' 25'' W. Elevation 412 m. 4.0 km west of Miami, Hwy. 23 W. Brown, loam soil, level area of swampy roadside ditch, topography - swamp, moderate soil nutrient content, no salinity, moderate drainage, tillage not affected by stoniness. Cropland and grassland vegetation. Small, isolated population in moist roadside ditch. Low population variability, effective population size - 75 plants, population area 100 meters square. Plants look like *H. nuttallii*, red stems, alternate, opposite leaves above, tall (2 m), serrated leaves. Typical *H. nuttallii* habitat. Past peak flowering, seed set questionable. No apparent insect or disease damage.

The following were collected by Mary Brothers, USDA, ARS, Iowa State