

DOCUMENTED PLANT CHROMOSOME NUMBERS 1986:1. MISCELLANEOUS COUNTS IN *ASTER* (COMPOSITAE)

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Semple et al. (1983) stated the need for chromosome counts of asters and other genera for the purpose of determining cytogeographic patterns. These patterns in turn could be used to determine the limits of distribution of infraspecific variants; in reconstructing biogeographic histories of species; in testing hypotheses on the evolution of infraspecific polyploidy; and in biosystematic studies (Strother 1972, Semple et al. 1983). With this purpose in mind, this paper reports chromosome number determinations to supplement the available counts in the genus *Aster*.

MATERIALS AND METHODS

Chromosome counts were made from freshly prepared material following the procedures of Chmielewski and Semple (1983). Root-tips were taken from transplanted rootstocks of plants collected in the wild or from seedlings grown in the greenhouse. Mitotic metaphase cells were examined to determine the chromosome number of each individual. Voucher specimens were deposited in the Herbarium of the Department of Biology, University of Waterloo (WAT). In citation, *Chmielewski* is abbreviated to C.

RESULTS

ASTER (VIRGULUS) × *AMETHYSTINUS* Nutt. $2n = 10$. CANADA. ONTARIO. **Brant Co.**: Tuscarora Township, 2.3 km SW of Sixty-nine Corners, C. 1768. **Perth Co.**: Ellice Township, Ellice Con. 4–5, 2.5 km W of Perth 12, C. 1864. **Peterborough Co.**: Asphodel Township, W of Asphodel Line 6 and Hwy 7, C. 2174.

ASTER *BOREALIS* (T. & G.) Prov. $2n = 16$. CANADA. SASKATCHEWAN. 14.5 km SW of Armit, W of North Armit River, *Hooper & Baker* 84091315, 84091316.

_____. $2n = 32$. CANADA. ONTARIO. **Bruce Co.**: St. Edmunds Township, Hwy 6, S of entrance to Cyprus Lake Provincial Park, C. & *Ringuis* 2040. **Oxford Co.**: East Oxford Township, intersection of Hwy 2

and Hwy 53, SE of Eastwood, *C. 1600*. **Wellington Co.**: Puslinch Township, Puslinch 7, 5 km N of Gore Rd. *C. 1355*. **SASKATCHEWAN**. Nitenai River, 7 km W of Hwy 163 and Hwy 9, *Hooper & Baker 84090806*.

ASTER CILIOLATUS Lindl. $2n=48$. **CANADA**. **SASKATCHEWAN**. 8 km N of Usherville, coulee W of Hwy 9, *Hooper & Baker 84090703*.

ASTER LANCEOLATUS Willd. $2n=32$. **CANADA**. **ONTARIO**. Wentworth Reg. Mun.: West Flamborough Township, Con. 6, 1.3 km W of Hamilton-Wentworth 4, *C. 1360*.

———. $2n=48$. **CANADA**. **ONTARIO**. **Brant Co.**: Onondaga Township, Creek Rd., 2.1 km E of McBay Rd, *C. 1323*. **Essex Co.**: Sandwich West Township, Windsor Salt Factory, *C. 1515*. **Halton Co.**: Burlington City Limits; North Service Rd., S of Aldershot, *C. & C. 1541*. **Kent Co.**: Walpole Island, SE of town of Walpole Island, *C. 1526*. Nipissing District: Hwy 11, 1.4 km N of Strathcona Township line, S of Temagami. *C. & C. 1306*. Nipissing District: Gladman Township, Hwy 11, Marten River, *C. & C. 1310*. Parry Sound District: South Himsworth Township, Hwy 11, Trout Creek rest area, *C. & C. 1315*. Timiskaming District, Dymond Township, New Liskeard, intersection of Hwy 11 and 11B, *C. & C. 1281*. Timiskaming District: Casey Township, 3.4 km S of Belle Vallee, *C. & C. 1291*. Timiskaming District: Chamberlain Township, Hwy 11, picnic area S of intersection with Hwy 112, *C. & C. 1302*. Timiskaming District: Hwy 11, 5.9 km S of Latchford, *C. & C. 1304*. Waterloo Reg. Mun.: Wellesley Township, *C. 1337*. **Wellington Co.**: Guelph Township, Wellington 72, 0.5 km SE of Speedvale Rd. *C. 1350*. **QUEBEC**. Hwy 101, 9.6 km N of Ville Marie, Ile de College, *C. & C. 1285*. 0.5 km W of Hwy 101, at turnoff to Ile de College Rd., N of Ville Marie, *C. & C. 1289*. **SASKATCHEWAN**. 8 km SE of Somme, *Hooper & Baker 84090304*. Pepaw Lake, *Hooper & Baker 84090306*. McBride Lake, McBride Lake Rd. 1, *Hooper & Baker 84090307*. 3 km E and 3 km N of Somme, *Hooper 84091301*. Bertwell, 15 km NE Reserve, Etommami River, *Hooper & Baker 84091302*. 20 km S of Hudson Bay, intersection of Hwy 9 and Pepaw River, *Hooper & Baker 84091310*. 40 km N of Arran, Mink Creek and Woody Lake Rd, *Hooper 84091505*. 15 km NE of Weekes, S shore of Neely Lake, *Hooper 84091601*.

ASTER aff. LONGIFOLIUS Lam. $2n = 64$. **CANADA**. **ONTARIO**. **Oxford Co.**: East Zorra Township, NE of Cassel, *C. 1607*.

ASTER NEMORALIS Ait. $2n = 18$. **CANADA**. **ONTARIO**. Nipissing District: E of Huntsville, *C. & C. 1579, 1580*.

ASTER PILOSUS Willd. $2n = 32$. **CANADA**. **ONTARIO**. **Gray Co.**: Bentinck Township, 11 km E of Elmwood, *C. 2269*.

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