

1987, *Carr* 8727, 17 Aug 1988, *Carr & Brown* 9125 (TEX); Colorado River at Hornsby Bend, 28 Aug 1988, *Carr & Price* 9186; Shoal Creek S of W 34th St., Austin, 2 Sep 1988, *Carr* 9195; Shoal Creek N of W 38th St., Austin, 2 Sep 1988, *Carr* 9200; Shoal Creek S of W 29th St., Austin, 2 Sep 1988, *Carr* 9205 (TEX); Shoal Creek N of Greenlawn Pkwy, Austin, 5 Sep 1988, *Carr & Price* 9211 (TEX); tributary of Bull Creek, N of Floral Park Dr., Austin, 7 Sep 1988, *Carr & Price* 9214 (TEX); slough, E side Lake Austin 1 mi N of Tom Miller Dam, Austin, 11 Sep 1988, *Carr* 9236 (TEX); Onion Creek at mouth of Williamson Creek, Austin, 12 Sep 1988, *Carr & Brown* 9238 (TEX); Onion Creek at Wm Cannon Dr., Austin, 12 Sep 1988, *Carr & Brown* 9239; Wells Branch at Walnut Creek Metro Park, Austin, 13 Sep 1988, *Carr* 9245 (TEX); Tannehill Branch at Bartholomew Park, Austin, 14 Sep 1988, *Carr & Brown* 9246 (TEX); Little Walnut Creek at Dottie Jordan Park, Austin, 14 Sep 1988, *Carr & Brown* 9247 (TEX).

Williamson Co.: roadside ditch, 13200 Pond Springs Rd., 8 Sep 1988, *Carr & Brown* 9216 (TEX); Lake Creek at US Rt. 183, 9 Sep 1988, *Carr & Brown* 9224 (TEX); Brushy Creek at IH-35, Round Rock, 10 Sep 1988, *Carr* 9235 (TEX).

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RANGE EXTENSION OF *ANTENNARIA AROMATICA* EVERT (ASTERACEAE: INULEAE)—Evert (1984) stated that *Antennaria aromatica* Evert was apparently not abundant in nature, reporting that the species occurred in three counties in Montana (Carbon, Cascade, and Gallatin) and seven localities in Park County, Wyoming. The species tends to be associated with limestone, talus, and xeric habitats at elevations between 1372 and 2928 m.

Bayer (1987) included only eight specimens of the 'narrowly restricted endemic' *A. aromatica* in a morphometric analysis of western dioecious *Antennaria*. He concluded that although *A. aromatica*, *A. media* Greene, and *A. umbrinella* Rydb. are morphologically similar and tend to intergrade into one another that *A. aromatica* was perhaps the most distinct. Based on our studies of western North American *Antennaria* (Chmielewski and Chinnappa 1988A, B, C, D) we consider this species to be distinct

from all others. *Antennaria aromatica* is differentiated from other species of *Antennaria* by its dark brownish-green phyllaries, copious and persistent glandulosity, widely cuneate-spatulate basal leaves, and distinctive citronella-like odor (Evert 1984). In contrast to Evert (1984) and Bayer (1987) our observation of herbarium specimens does not support the contention that the species is restricted to southwestern Montana and adjacent parts of Idaho and Wyoming. We include the following list of locations to complement those previously reported by Evert (1984).

CANADA. **Alberta**, 25.7 km SSW of Lundbreck, Table Mountain, 49°-21'N, 114°-18'W, Oldman River Watershed, 1676-1829 m, limestone, 20 Jul 1972, C. D. Bird & T. Koponen 28669 (UAC 25322). **British Columbia**, Relay Creek Cabin, E of Small Lake, 51-12'N, 122°-57'W, 2075 m, convex SE facing gentle slope below rocky cliff, primarily lichen covered rock with some juniper, scrubby *P. albicaulis*, *Abies* and *Dryas*, alpine, fellfield W of saddle, 17 Jul 1978, C. Selby 289 (UBC V168983).

U.S.A. **California**. Mono Co.: 1.0 km N, 1.0 km W of the summit of Wheeler Peak, Sweetwater Range, approximately 3445 m, steep, turfy slope, rocky soil on an east facing slope, probably under winter snow, 22 Jul 1977, K. L. Bell & R. E. Johnson 766 (WS 283425). **Montana**. Carbon Co.: Quad Cr., 37 km SW of Red Lodge, 2896 m, coarse talus, 7 Aug 1955, A. Cronquist 8092 (DAO 466067, 466065; UBC V51550); NE end of Beartooth Plateau, below Hwy 212, steep rock slope, wind blown, west facing slope, 22 Aug 1983, B. Neely & F. Smith 1665 (RM 362205). Cascade Co.: King's Hill, 72 km SSE of Great Falls, alpine zone, 24 Jul 1948, R. F. Daubenmire 48231 (WS 181768). Gallatin Co.: Wallrock Basin, approximately 19 km NW of Wilsall, 8 Jul 1921, W. N. Saksdorf 1063 (WS 134519); Bridger Mountains, Frazier Lake Area, E of Hardsrabble Peak, 29 Jun 1977, Frank Forcella (MONT 69298).

The most significant of these collections are from Alberta, British Columbia, and California. Each of these represents new reports for the respective regions and extend the range of the presumed endemic approximately 350 km to the NNW, 850 km to the NW, and 1100 km to the SW. With the inclusion of these specimens the habitat requirements of the species still appear to be fairly specific, the species occurring predominantly on limestone or talus. One minor additional difference is that a single collection was reported from approximately 3445 m elevation, whereas previously (Evert 1984) the species was reported from elevations up to 2928 m.—J. G. Chmielewski, Department of Biology, University of Waterloo, Waterloo, Ontario, N2L 3G1, and C. C. Chinnappa, Department of Biological Sciences, University of Calgary, Calgary, Alberta, T2N 1N4, CANADA.

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HIERACIUM UMBELLATUM (ASTERACEAE) IN WEST VIRGINIA AND QUEBEC.—On Sep 1985 I collected a specimen of the circumboreal hawkweed, *Hieracium umbellatum* L., from a small patch in the disturbed clearing about the communications tower near the summit of Spruce Knob, Pendleton County, West Virginia (Uttal 14048; VPI). Interestingly, another specimen from the same site was independently collected and identified five days later (E. E. Hutton *s.n.*; VPI). These collections constitute a new record for West Virginia and the southeastern United States. Considering the long history of abundant botanizing by competent botanists on Spruce Knob, the species may well be a recent adventive at this site or it would have been detected before. The plant should be watched for at other high elevation sites elsewhere in the Appalachian system.

Recent manuals aver that *Hieracium umbellatum* does not occur in North America south of Ontario and northern Michigan. In 1898, the first edition of the Britton and Brown Illustrated Flora (III:268) stated that the species occurs in Ontario in the lower St. Lawrence River area. In the second edition of this flora (1936, III:330), the St. Lawrence report was stated to be an "apparent error." Subsequently, the species was excluded in North America east of Michigan. In the latter work the species is listed as *Hieracium scabriusculum* Schwein.

Contradictorily, we have three specimens from the St. Lawrence drainage in southwestern Quebec in VPI: Chambord, comté de Roberval, 12 août 1974 (R. Cayouette 10604 *et al.*); Mistassini, comté de Roberval, 12 août 1963 (J. Cayouette *s.n. et.*); Sainte-Placide, comté de Charlevoix, 27 août 1971 (J. Cayouette *s.n.*). All are from ruderal sites. The first two are from the Lac St. Jean area, which drains into a tributary of the St.



Chmielewski, Jerry G. and Chinnappa, C C. 1988. "RANGE EXTENSION OF ANTENNARIA AROMATICA EVERT (ASTERACEAE: INULEAE)." *SIDA, contributions to botany* 13, 256–258.

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