Notes

White Malaxis, *Malaxis monophyllos* var. *diphyllos*, an Addition to the Orchids of Canada from the Queen Charlotte Islands, British Columbia.

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Two collections in 1981 and 1982 extend the range of *Malaxis monophyllos* var. *diphyllos*, approximately 2000 km southeast of those described from the Aleutian Islands, Alaska.

Key Words: White Malaxis, *Malaxis monophyllos* var. *diphyllos*, Queen Charlotte Islands, range extension.

During vegetation sampling for a forest habitat type classification in the Queen Charlotte Islands, I discovered a variety of White Malaxis or Adder's-mouth, *Malaxis monophyllos* (L.) Schwartz var. *diphyllos* (Chamisso) Luer, previously described only from the Aleutian Islands in Alaska. This new record represents a disjunct population approximately 2000 km southeast of its known range (Figure 1).

The first collection was made on September 11, 1980 in a topogenous bog at 390 m elevation on southeastern Graham Island, 10 km north of Queen Charlotte City, B.C. (53° 19′N, 132°07′W). The specimens had passed the flowering stage, so a positive identification was not possible. A second collection at the same locality on June 16, 1981 procured several flowering specimens. My identification of them as *M. monophyllos* was confirmed by Dr. Roy L. Taylor, Director of the Botanical Garden at the University of British Columbia, Vancouver, who determined them to be the variety *diphyllos* from Luer (1975). Two specimens have been deposited in the University of British Columbia herbarium. The species is new to the flora of the Queen Charlottes, and the variety is new to Canada.

Collected specimens are 15-20 cm tall, arising from an ovoid corm 1-1.5 cm in diameter, with two leaves of nearly equal size sheathing the stem. The flowering spike is a raceme of up to 60 small yellowish-green flowers with the lip uppermost, as in the typical variety.

The presence of two robust leaves distinguishes this plant from the typical variety, which has a single leaf or occasionally two leaves, with the second being very inconspicuous. Hultén (1968) did not recognize the variety *diphyllos* in the Flora of Alaska, nor did Scoggan (1978) in the Flora of Canada. A third variety, var. *brachypoda*, was collected previously in several locations in coastal B.C. (Szczawinski 1959). It differs

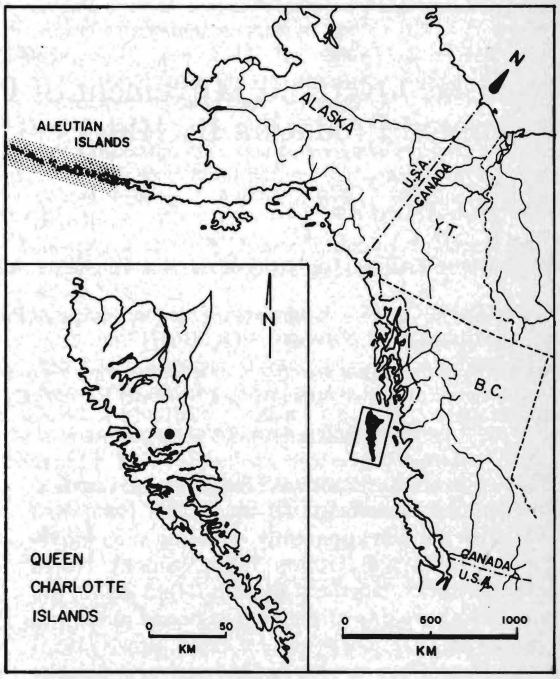

FIGURE 1. Previous known distribution of *Malaxis monophyllos* var. *diphyllos* is shaded with the new locality indicated with a solid circle on the map inset.

from the other varieties in that the flowers are inverted, so that the lip is lowermost. This variety is not recorded on the Queen Charlotte Islands; however, a second species, *Malaxis paludosa* (L.) Sw., is found there (Calder and Taylor 1968). It is generally a much smaller plant with fleshy leaves and is not easily confused with *M. monophyllos*. Both species of *Malaxis* are rare in British Columbia or at least poorly collected because they are an inconspicuous element of the plant associations in which they occur.

My collections were made on a site representing a transition between bog and closed coniferous forest. The open, scrubby tree canopy included *Tsuga heterophylla, Tsuga mertensiana, Thuja plicata* and *Chamaecyparis nootkatensis. Vaccinium ovalifolium, V. alaskaense* and *Menziesia ferruginea* were the most common shrubs present. *Malaxis* occurred in a lush herbaceous patch in a small colony of scattered individuals. Associated vascular plants included *Veratrum viride, Dodecatheon jeffreyi, Athyrium filix-femina, Montia sibirica, Lysichiton americanum* and *Carex anthoxanthea*. A dense carpet of bryophytes including *Rhizomnium glabrescens, Leucolepis menziesii* and *Conocephalum conicum* occupied most of the ground surface where *Malaxis* was present. *Sphagnum* spp. were notably not abundant. Plants were rooted in a surface soil horizon of well decomposed, black, mucky humus overlying deep peat layers of moderately decomposed *Sphagnum* and *Carex*. Observations of *M. monophyllos* in other localities in the Queen Charlottes have not as yet been made.

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