

plants of the Yellow Lady's Slipper; I was groping about in this wood and had knelt down to examine some vines of the beautiful little twin-flower (*Linnaea borealis*) when I spied some small spikes of a strange fern; they were not more than 3 or 4 inches high and were evidently a *Botrychium*. I sent some specimens to the late Dr. Fletcher, of Ottawa, who thought they were *B. matricariae*, but he said he had never found the Matricary Grape Fern (now called *B. ramosum*), and my plant might prove a variety of *B. simplex*. This was my own feeling at the time and I was confirmed in it the following season when I found *B. matricariae* (*ramosum*) growing plentifully in the Algonquin Park.

I have visited the colony every season since and have observed the plants closely. They show above the ground early in June; probably soon after the floor of the wood ceases to be inundated and the saturation of the vegetable mould is relieved by evaporation. Well-grown plants attain a height of from 7 to 9 inches (partly under ground) by the middle of July, at which time the spores are shed, by the end of July, or early in August, the plant becomes flaccid and wilts to the ground. Specimens gathered in the middle of June are about 4 inches long, the sterile frond longer than the fruiting, but in the mature plant these relations are reversed, the fertile frond considerably exceeding the barren; the appearance and shape of this latter are remarkably constant—it develops from about the middle of the main stem, occasionally lower, sometimes a good deal higher; it is always long-stalked and ends in a leaf blade of from 2 to 4 pairs of obovate or cuneate, sometimes nearly lunate, sessile lobes; these lobes are nearly opposite, and beyond them a single lobe, boldly notched, forms the apex of the frond. The plant is very fleshy and pale-green, more fleshy and pale than *B. ramosum*, which in turn is not so foliaceous or dark-green as *B. lanceolatum*.

In pressed specimens the bud at the base is rarely, if ever, visible, owing to the stem above the root being wrapped in the dry brown sheaths of previous years; in *B. ramosum* the next year's bud is almost always conspicuous as a dark-green projection in the pressed specimen. In the lobes of the leaf there occurs no mid-vein, just a fan-like spreading of the free, forking veins from their wide indeterminate base in the rhachis; in *B. ramosum* there does seem to be a mid-vein (doubtless lost in ramifying) which governs the growth of the secondary veins through the lobes and subdivisions of the leaf; these in *B. ramosum* consequently tend to terminate in a point, blunter indeed than those of *B. lanceolatum*, but distinct from *B. simplex*, which would seem to be a miniature and close kinsman of the famous Moonwort