NOTE ON THE PROBABLE OCCURRENCE OF *ALDROVANDA VESICULOSA* IN N.S.W.

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(Plate xvi.)

In the year 1747 a highly remarkable aquatic plant was discovered in Italy, and described by Monti, then Professor at Bologna, namely, the *Aldrovanda vesiculosa*. Long afterwards it was found in Bengal, then in the south of France, later in Austria, south-western Russia and Prussia. Suddenly and quite unexpectedly, in 1867, the plant was gathered in a swamp near Rockhampton, Queensland, by the late Mr. P. O'Shanesy; thus it is but reasonable to suppose that it may yet be found in many other places in Australia; but it is apt to escape notice, being usually entangled among other water-plants. Indeed I found fragments of *Aldrovanda* among dried specimens of *Utricularia vulgaris*, gathered in Silesia at the commencement of the century, the collector never observing the prize which had come within his reach. To draw prominently attention to this most curious weed, a lithographic illustration is prepared now for Australian use; and the advice is given, when lakes, swamps or river-bends are raked for floating or submerged plants, to watch also for fragments of *Aldrovanda*. It seems shy in flowering; but the petals, when developed, are rather conspicuous and white. At Calcutta the plant occurs also in "salt pans;" but Dr. Roxburgh already found it there in fresh waters also, alike to its ordinary occurrence elsewhere. Ripe fruits seem seldom to have been obtained. The plant soon becomes rootless, moving free about. The folded but vesicular-turgid, transparent and irritable lamina of the leaves catches (and perhaps digests)

minute aquatic animals. The stigmas, when the flower rises to the surface, obtain the pollen through the action of insects (Schenk). Irrespective of seedlings, the plant hibernates from leaf-buds (Leiboldt). Vascular bundles in the leaves are wanting (Oels). *Aldrovanda*, as a genus, differs solely from *Drosera* in its vegetative organs, the external aspect being much that of *D. stolonifera* from West Australia; and here it should also be remarked, that the great differences exhibited in habitual respect and leaf-organisation by species of *Utricularia* count not as of generic value, *U. stellaris* being even provided with a whorl of turgid float-organs under the raceme, consisting of metamorphosed leaves.

EXPLANATION OF PLATE XVI.

Aldvovanda vesiculosa.

Fig. 1. A whorl of leaves.

Figs. 2 and 3. Separate leaves.

Fig. 4. Flower unexpanded.

Fig. 5. Flower expanded.