## NOTES ON SOME PLANTS OF THE COUNTY LIMERICK.

## By ELEONORA ARMITAGE.

I am glad to respond to the request of the Secretary of the Limerick Field Club that I should give a few jottings about some of the plants that I saw when in the County Limerick. It would be ungrateful not to do so after the kindness I have experienced from the Club; but, at the same time the presumption of any such attempt on my part is so great that I am appalled at my boldness. Any one who knows the years of patient and constant observation that must go to the study even of a restricted locality before one can pronounce with any measure of certainty on the extent and characteristics of its Flora, will smile at the crude and hasty generalisations which alone can proceed from one whose acquaintance with the district is as limited as my own.

I was staying for a few weeks in the county in July and August, 1901. During this time walks were taken over some small patches of bogland, through cultivated ground and by roadsides in the Townland of Lisnagry, with one or two excursions farther afield, such as to the banks of the Shannon below Castleconnell, to Adare and to Glenstal. Practically, my knowledge of the county is limited to a radius of a mile or so of the Thornfields demesne. The weather had been unusually dry and the season also was late for flowering plants, most of which were past their best and many completely over, so I only noted about 390 plants in all, that is to say of Phanerogams and Ferns.

BOG PLANTS IN AND ABOUT LISNAGRY.

As cultivation yearly encroaches on the few remaining bits of bogland in this district, and these will, probably, all disappear in the not far distant future, there may be some historical interest in after years in recalling some of the plants growing therein at the beginning of the Twentieth Century. The drier parts were bright with *Lotus uliginosus* 

Schkuh (1) and Potentilla sylvestris Neck in July; later on, there were patches of the purple Scabious, Scabiosa succisa L, and among them one met with some heads of albino flowers of a creamy white colour. The commonest plants of the Heath Family were Erica tetralix L. in several soft shades of pink; and sometimes a plant with pure white flowers and bright green foliage, characteristic of the true albino; in the plants with coloured flowers, there is always a strong, reddish tinge on the upper leaves and flower stalks. The fine-leaved Heath, Erica cinerea L. seemed to be absent from the lowland bogs. The common heather Calluna Erica DC. was only beginning to flower in August. Among the moister tussocks of herbage a few plants of Andromeda polifolia L. were seen, and Potentilla palustris Scop. with its claretcoloured flowers seemed to like similar spots. The Orchises affected open patches of ground where the other vegetation was short and rather scanty. The species observed were Orchis pyramidalis L. on the drier outskirts and roadsides within reach of calcareous soil; Orchis maculata L. in fine development and in profusion, but not showing much variation excepting here and there a white, unspotted specimen. Owing to the absence of both O. incarnata L. and O. latifolia L. there was no opportunity for the occurrence of hybrids. Three species of Habenaria were found, each of which grew in a little colony by itself. H conopsea Benth. so richly fragrant, varied a good deal in colouring; in H. viridis R. Br., the Frog Orchis, the flowers were very uniform, but the plants varied much in size, some being twice as large as others. H. bifolia R. Br., was almost over in mid July, but the flowers were still in sufficiently good condition for the distinctive characters to be detected which separate it from the very similar Butterfly Orchis. H. chloroleuca Ridley. These are, the parallel cells of the anthers, and the central line between them being a furrow in front and a keel behind; while in the latter plant the last character is reversed and the anther cells are twice as distant at the base as at the top; other small differences also exist.

Among plants of the open spaces were the ubiquitous Toad Rush, Juncus bufonius L., the tall, slender Wood-Rush, Luzula erecta Desv. in the form with congested heads; Triglochin palustre L., and in small quantity Narthecium ossifragum Huds., the Bog Asphodel. Little patches of Sagina nodosa Fenzl, enlivened the ground with tiny, starry

<sup>(1)</sup> All names correspond to those of the 9th Ed. of the Lond. Cat.

white flowers. In August, a curious form of *Vicia augustifolia* L., was observed climbing over low herbage. The time of flowering was over, but here and there among the leaflets were small objects which strongly resembled small, leguminous pods with the characteristic constrictions between the seeds. On opening them, there were a few small, round, white objects which simulated seeds. Specimens were sent to Professor George Henslow, who reported that these deformed leaves were the result of the stimulation caused by the puncture of a small insect, a species of Thrips, and the small, white objects were its eggs.

In the narrow water ditches intersecting the boggy ground was the Ivyleaved Crowfoot, Ranunculus hederaceus L., with its tiny white flowers; two species of Duckweed, Lemna minor L., L. polyrrhiza L.: also, Myriophyllum verticillatum L., with its pretty pinnatifid bristle-like leaves and bracts, and the axillary whorled flowers. The surface of some of the larger ditches was covered with a matted growth of the water grass, Catabrosa aquatica Beauv, while the edges were fringed with Stachys palustris L., and here and there Oenanthe crocata L., Bidens cernua L., the nodding Bur-marigold; Rumex Hydrolapathum Huds., the large, handsome Water Dock, with its long pointed leaves; some common rushes including Juncus lamprocarpus Ehrh. and J. acutiflorus Ehrh.; a few ferns, as Lomaria spicant Desv., Lastræa spinulosa Presl., L. dilatata Presl., and some rather stunted plants of Osmunda regalis L. The Marsh Horsetail, Equisetum palustre L., grew luxuriantly with its many-headed variety, polystachyum. The only Club-moss met with was Lycopodium selago L.

In bogholes of varying depth and size, upon and among the dense growth of bogmoss, were several interesting plants. The Buckbean, Menyanthes trifoliata L.; Marsh Pennywort, Hydrocotyle vulgaris L.; a couple of Pondweeds, Potamogeton natans L., and P. Coloratus Hornem; the variable little Rush, J. supinus Mænch, with its variety which has viviparous flowers, giving a whorled appearance to the creeping shoots; and a common grass, Agrostis canina L. which, when it strays into bogholes adopts a similar, curious manner of growth, and is very distinct looking. But the gem of all—it only grew in deep holes—was the Lesser Bladderwort, Utricularia minor L.; a bright green, branching plant, floating, or creeping among Sphagnum, bearing little bladders on the finely forked leaves. It was flowering profusely, and it

is only at this time that it is easy to find. The little pale yellow flower with its personate corolla, grows on a slender scape, raised about four inches above the surface of the moss, two or more flowers on each scape. On Sphagnum growing on drier spots there was abundance of the Round-leaved Sundew, *Drosera rotundifolia L.* which, in bright sunshine, opens its white flowers. On one spot there was a dense growth of several hundreds of plants of the large handsome Sundew, *Drosera anglica* Huds.; its glistening red leaves gave the patch quite a ruddy hue when looked at from a distance. The pretty little bog pimpernel, *Anagallis tenella* L., was found, but seemed to be uncommon.

## WILLOWS AND BIRCHES.

Almost the only trees which seemed to grow spontaneously, were Willows and Birches, on bogs and by the Shannon. I only came across the common species of Willow, Salix viminalis L., S. fragilis L. S. alba L., S. cinerea L., S. aurita L., S. repens L., and one hybrid, S. aurita x cinerea. The birch thickets on the bog ground comprised three forms. Betula verrucosa Ehrh., the White Birch with very rough tuberculated shoots and large, smooth rhomboidal triangular leaves with deep double serrations. Betula pubescens Ehrh., and the var. denudata Gren. and Godr., (B. glutinosa of Fries), two forms of the Common Birch, distinguished from the first species by being more shrubby and less tree-like, and by the smaller rhomboid ovate leaves; in the type the young twigs and leaves are downy, in the variety they are smooth.

## ROADSIDE AND MEADOW PLANTS.

The most striking and abundant of meadow plants were the Ragwort, Senecio Jacobæa L.; Marsh Woundwort, Stachys palustris L.; Purple Loosestrife, Lythrum salicaria L.; and Meadow Sweet, Spiræa Ulmaria L.; these were very ornamental, though scarcely an acquisition in pastures. I found a peculiar form of Stachys palustris of a much paler colour and softer foliage which may prove to be the variety canescens, but I have not yet been able to compare it with a specimen of that variety. The Large Burnet Saxifrage, Pimpinella major Huds., was very plentiful along the roadsides, while another conspicuous plant which does not occur very commonly was the Dwarf Elder, Sambucus Ebulus L.

Several plants one expected to find on carboniferous limestone seemed to be absent, notably Hawkweeds, the only one seen being the

little Mouse-ear Hawkweed, *Hieracium Pilosella L.* The pretty grass *Melica nutans* L., one associates with this formation, but I believe it does not occur in Ireland.

SOME SEDGES.

I may here note the Cyperaceæ met with, though they are but few in number. Eleocharis palustris R. Br., in marshy ground. nauciflorus Lightf., on bogs. S. lacustris L., riversides. It was interesting to see the large patches of S. triqueter L., so lately discovered by one of the members of the Club in the tidal mud on the right bank of the Shannon at Limerick, and in close proximity was growing S. maritimus I. Erionhorum angustifolium Roth., and Rynchospora alba Vahl., were common on bogs. Carex pulicaris L., I found on bogs, but was surprised at not seeing any C. dioica L. Then there was C. teretiuscula Good, with its long, slender stems and foliage and pretty short brown heads. echinata Murr., on bogland also; and the elegant green C. remota L., by damp roadsides. In similar localities grew C, divulsa Good, tall and slender, with many interrupted spikelets, and white pointed membranous glumes with green keels which give the spikes a grevish appearance. Several of the Sedges were difficult to determine, owing to their having a different appearance to the same growing in England, being "off type" as the phrase is, but the Rev. E. F. Linton has named most of them. A large handsome species from the Shannon bank seemed only referable to C. Hudsonii Ar. Benn.; some of C. acuta L. was fairly typical, others more nearly approached the variety tricostata Fr.; some of C. Goodenowi J. Gay, looked typical, others from another hog more nearly resembled the variety juncella T. M. Fries., but did not attain to its size. C. flacca Schreb, was of course, abundant, and C. nanicea L., was met with; also, C. sylvatica Huds., and C. binervis Sm. C. Oederi Retz., was found on boggy ground, and its pretty small variety C. chrysites. In one bog ditch there were good specimens of the handsome sedge C. Pseudocyperus L.; C. riparia Curtis, grew by the river Maigue, where there was also C. rostrata Stokes.

SANDHILL FLORA AT LAHINCH, Co. CLARE.

We may just stray out of our county into the neighbouring one of Clare to glance at the interesting sandhill Flora at Lahinch. I can only mention a few plants that attracted my attention during a half-hour's stroll. The lower ground between the sandhills was carpeted with

bright flowers, they all seemed to share the characteristic of gregariousness; for though there were not many species they made up for that in the quantity of individuals. On the sand itself grew the Sea Marram Grass, Ammophila arundinacea Host. There were large, spreading plants of a handsome form of the Yellow Pansy Viola lutea Huds. flowers were very purely yellow, and showed little tendency to vary in form and colour as one usually notices with the plant when it grows on mountains. Fresh specimens were submitted to Mr. E. G. Baker, who has made a speciality of this genus, and he said it was an unnamed variety, which approached rather nearly to one named V. Symei by his father, Mr. J. G. Baker. Another interesting plant which grew in great abundance was a small, compact form of Eyebright; the whole plant had a sturdy growth, and the texture of the leaves was thick and leathery; the habitat probably, would account for this. It was sent to Mr. F. N. Townsend, the authority on Eyebrights, and he considers it to be the form Euphrasia curta v. glabrescens. Other plants growing in bright coloured patches were a pretty variety of the common Centaury, Erythræa Centaurium var. capitata; a small form of Crepis virens L., Sagina nodosa Fenzl., Erodium cicutarium L'Hérit; and Galium verum L., while scattered about were Campanula rotundifolia L., Arenaria pepoides L., and Cerastium tetrandrum Curtis.

In the gardens near grew Lavatera arborea L., and on waste ground the handsome Mallow Althea afficinalis L.