

Short Notes

362/1. *MONOTROPA HYPOPITYS* L.—New to Fife (v.c. 86).

A colony of *Monotropa hypopitys sensu lato* was found in Tentsmuir Forest, Fife (GR.37/50.24) on 24th June, 1967. It has been under observation since that time and produced some 190 stems in the summer of 1968.

The nearest record to this one is in Cleish parish, Kinross, attributed to A. Robertson (Young 1936), but it is quite unsubstantiated and may be an error since it is not in Robertson's list published by Balfour (1894), the only source of Robertson records referred to by Young. The nearest authentic records, based on specimens in the Perth Museum are Perth (McRae, 1904) and Killin (McNab, 1857). The most northern record in Scotland as far as I can ascertain is Cawdor Woods, Nairnshire.

The Tentsmuir plants are growing under *Pinus sylvestris*, 35-40 feet high, planted about 40 years ago over old sand dunes. The sand is now covered with a deep litter consisting mainly of decaying pine needles. The ground flora in and around the colony is dominated by mosses, chiefly *Pleurozium schreberi*, *Plagiothecium undulatum*, *Hypnum cupressiforme*, and *Rhytidiadelphus triquetrus*. Other associates are *Dicranum scoparium*, *Peltigera canina*, *Goodyera repens*, *Festuca ovina*, *F. rubra*, *Carex arenaria* and occasional plants of *Veronica officinalis* and *Senecio jacobaea*.

The plants appear to be intermediate between *Monotropa hypopitys* L. and *M. hypophegea* Wallr. as described by Clapham, Tutin and Warburg (1962). The question of intermediates is discussed in the *Critical Supplement to the Atlas of the British Flora* in the light of work done by D. J. Wicker. A taxonomic investigation is now being made at the St Andrews University Department of Botany and it is hoped soon to obtain a chromosome count. This should enable us to determine the status of the Fife plants.

Dried and spirit material from the Tentsmuir colony has been deposited in the herbarium of the Department of Botany, University of St Andrews.

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A. ANGUS

716/g. *SPARTINA GLABRA* Muhl.—In the British Isles.

Spartina glabra is a member of the *S. alterniflora* complex and has been treated by a number of American authors as *S. alterniflora* var. *glabra*. A study of the population at Southampton Water by Marchant (1967) and Marchant & Goodman (1969) has convinced these authors that the taxon deserves specific rank.

Marchant & Goodman (1969) give the following detailed description—'*Spartina glabra* is a large, graceful grass 100-120 cm tall, with a drooping habit rather than the erect rigidity of the other British *Spartina* species. The matted roots are penetrated by long, steeply descending and ascending rhizomes with long internodes. The leaves

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are longer and laxer than in *S. alterniflora*, but are otherwise similar in the two species. The inflorescences are 20–35 cm long, with eight to twelve spikes. The spikes (5–15 cm long) are spaced out in a raceme and distantly inserted along the rachis. The spikelets are 12–14 mm long, by 1–1½ mm wide, each covering about half the length of the spikelet above. The lower glume is almost subulate and ciliate to the tip, 6 mm long, without a membranous border, one to three nerved and glabrous to the naked eye. The upper glume is very narrow, ciliate to the tip, and with cilia extending beyond as a crest: this glume is 12–14 mm long by 1–1½ mm wide, without a membranous border, three to five nerved and, though glabrous to the naked eye, distinctly pilose under the binocular microscope. There are three stamens, with anthers 5–5½ mm long, exerted at maturity and dehiscing to produce good pollen. The fruit is a caryopsis 8–10 mm long and viable.

Details of the British distribution given by Marchant & Goodman are as follows: v.c. 9, Dorset: plants from America were planted in Poole Harbour by Prof. F. W. Oliver in 1924. They apparently failed to survive for very long. Tillers from the Southampton water population were planted in the Nature Conservancy's 'Spartina garden' at Keyworth, Poole Harbour in 1963. The plants survive and are spreading. v.c. 11, S. Hants: tillers introduced from America were planted at Eling, Southampton Water by Prof. S. Mangham in 1924. The only surviving stand of this original introduction is a single clump about 10 m in diameter. The clump is centred on the original planting site and is surrounded by *S. × townsendii* and *Scirpus maritimus* into which it is slowly spreading. v.c. 27–28, Norfolk: material from America was planted at Blakeney Point by Prof. F. W. Oliver in 1924. The plants died in 1925. v.c. 106, E. Ross: introduced at Udale Bay, Cromarty Firth in 1947 or 1948.

Hitchcock (1951) considers that the taxon occurs throughout the southern native range of the *S. alterniflora* complex. This complex extends down the eastern seaboard of North America from Quebec and Newfoundland to Florida and Texas.

The synonymy of *S. glabra* is as follows:—

Spartina glabra Muhl., Desc. Gram.: 58 (1817).

Dactylis maritima Walt., Fl. Carol.: 77 (1788), non Curtis (1787).

Spartina stricta (Ait.) Roth var. *glabra* (Muhl.) Gray, Man., 2nd ed.: 552 (1856).

Spartina alterniflora Lois. var. *glabra* (Muhl.) Fern., Rhodora, 18: 178 (1916).

Spartina maritima (Curt.) Fern. subsp. *glabra* (Muhl.) St Yves, var. *glabra* St Yves, Candollea, 5: 48 (1932).

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