

NOTES ON CAREX FLAVA AND ITS ALLIES

I—A SEDGE NEW TO THE BRITISH ISLES*

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A sedge known to Scandinavian botanists as *C. pulchella* (Lönnr.) Lindman was recognised in Scotland during the summer of 1952. This name is now found to be invalid owing to the existence of an earlier homonym, and the new name chosen is *C. scandinavica* E. W. Davies. A description of the species follows.

***Carex scandinavica* E. W. Davies, nom. nov.**

C. oederi Ehrh. subsp. *pulchella* Lönnroth, 1854, *Obs. Crit. Pl. Suec.*, 24.

C. pulchella (Lönnr.) Lindman, 1918, *Svensk Fanerogamflora*, 152; non Berggr. 1878.

A tufted glabrous perennial, (2-) 10-15 (-25) cm. high. Stems trigonous, smooth. Leaves 0.5-2 mm. wide, inrolled, channelled, dark green, usually shorter than the stems; ligule 1-2 mm., triangular or rounded. Lower sheaths often dark brown becoming fibrous. Male spike 1, 2-20 × 1-2 mm., usually with a short peduncle. Male glumes 3-4 mm., ovate or oblong, acute or obtuse, brown with a pale midrib. Female spikes 2-3 (-5), 3-10 × 3-5 mm., somewhat distant, rarely contiguous, sessile, or the lower shortly peduncled. Lower bracts leaf-like, spreading, usually shorter than the inflorescence, sheathing. Female glumes 2-3 mm., ovate, subacute, keeled, dark brown, with a pale or green midrib. Perigynia (1.0-) 1.5-2.5 mm., straight, feebly 2-3-ribbed, greyish green, very abruptly contracted into the short (0.25 mm.) beak. Nuts 1.5 mm., obovoid-trigonous, completely filling the perigynia. Fl. 5-7. Fr. 6-8.

This species, hitherto known only from N. Russia, Finland and Scandinavia, was first recognised in Britain during the summer of 1952, from one inland and four maritime localities in north-western Scotland, where it appears to replace the closely allied *C. serotina* Mérat (see distribution map, fig. 2.) The main characters distinguishing these two species, which have the same chromosome number ($2n = 70$), are given below.

Characters	<i>C. serotina</i> Mérat (Plate 5a)	<i>C. scandinavica</i> E. W. Davies (Plate 5b)
1. Leaves	1.5-3 mm. wide, canaliculate, grey-green, usually longer than the stems.	0.5-2 mm. wide, inrolled, dark green, usually shorter than the stems.
2. Spikes. a. Male	1, or sometimes absent, sessile, occasionally female at the base.	1, always present, usually with a short peduncle.
b. Female	(3-) 4-5 (-6), contiguous and sessile, frequently crowded round the male spike, occasionally the lowest remote and peduncled.	2-3 (-5), often separate, and somewhat distant, rarely contiguous, sessile or the lowest shortly peduncled.
3. Bracts	Lowest bracts leaf-like, upright or spreading, exceeding the inflorescence.	Lowest bracts leaf-like, spreading, usually shorter than the inflorescence.

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Characters	<i>C. serotina</i> Mérat (Plate 5a)	<i>C. scandinavica</i> E.W. Davies (Plate 5b)
4. Female glumes	Pale yellow-brown	Dark brown, with a pale or green midrib.
5. Perigynia (Fig. 1)	(1.75-) 2.0-2.5 (-3.0) mm., straight, yellow-green, more or less inflated; beak 0.25-0.5 mm.	(1.0-) 1.5-2.5 mm., straight, grey-green, never inflated; beak 0.25 mm.
6. Nuts	Never completely filling the perigynia.	Completely filling the perigynia.
7. Periodicity	Flowers 6-8. Fruit 7-9.	Flowers 5-7. Fruit 6-8.



Fig. 1. Perigynia : left, *Carex serotina*; right, *C. scandinavica*.

These two allied species have different distributions in the British Isles, and as can be seen in the distribution map *C. scandinavica* appears to replace *C. serotina* in N.W. Scotland. The map is based on data obtained from Nelmes (1947) and from specimens seen in the field and from the following herbaria : Kew, Oxford, Cambridge University College, Leicester and J. E. Lousley. The details of the localities and their vice-counties not given by Nelmes are listed below.

LOCALITIES IN THE BRITISH ISLES

C. SCANDINAVICA E. W. Davies

- V.c. 88. MID PERTH : Fearnan Pier, Loch Tay, 1952, E.W.D.
 97. WESTERNESS : Arisaig, 1951, E.W.D.
 104. N. EBUDES : shore at Drynoch, Skye, 1938, J. E. Lousley.
 105. W. ROSS : Loch Carron, 1952, E.W.D.; the mains, Loch Torridon, 1952, E.W.D.; shore, Ob Mheallaigh, Shildaig, Upper Loch Torridon, 1947, R. Mackechnie & E. C. Wallace.
 108. W. SUTH. : Kylesku Ferry, 1952, E.W.D.
 110. OUTER HEBRIDES : Berie Sands, Uig, Lewis, 1946, E. F. Warburg; Meall Geal, Uig, Lewis, 1946, E. F. Warburg.
 112. ZETLAND : bog, Fair Isle, 1949, E. A. G. Duffey.

C. SEROTINA Mérat

- V.c. 4. N. DEVON : Braunton Burrows, 1952, E.W.D.
 6. N. SOM. : Shapwick Peat Moor, 1951, E.W.D.
 9. DORSET : Littlesea, 1951, E.W.D.; South Haven, Poole Harbour, 1937, E. C. Wallace.
 11. S. HANTS. : Hatchet Pond, Beaulieu, 1952, E.W.D.; Sowley Pond, 1913, J. Comber.
 12. N. HANTS. : Fleet Pond, 1952, E.W.D.
 17. SURREY : Frensham Little Pond, 1952, E.W.D.
 23. OXON. : Port Meadow, Oxford, 1946, J. E. Lousley.
 26. W. SUFF. : Poor's Fen, Lakenheath, 1951, S. M. Walters.
 28. W. NORF. : Wretton Fen, 1925, J. E. Little; Shouldham Warren, 1919, J. E. Little; Derby Fen, 1951, E.W.D.; Leziate Fen, 1951, E.W.D.
 29. CAMBS. : Fulbourn Pond, 1951, E.W.D.; Wicken Fen, 1951, E.W.D.
 31. HUNTS. : Woodwalton Fen, 1909, G. C. Druce.
 33. E. GLOS. : South Cerney gravel pit, Cirencester, 1951, E.W.D.
 41. GLAM. : Kenfig, 1935, J. E. Lousley; Oxwich Burrows, 1948, J. E. Lousley; Port Talbot, 1903, G. C. Druce.

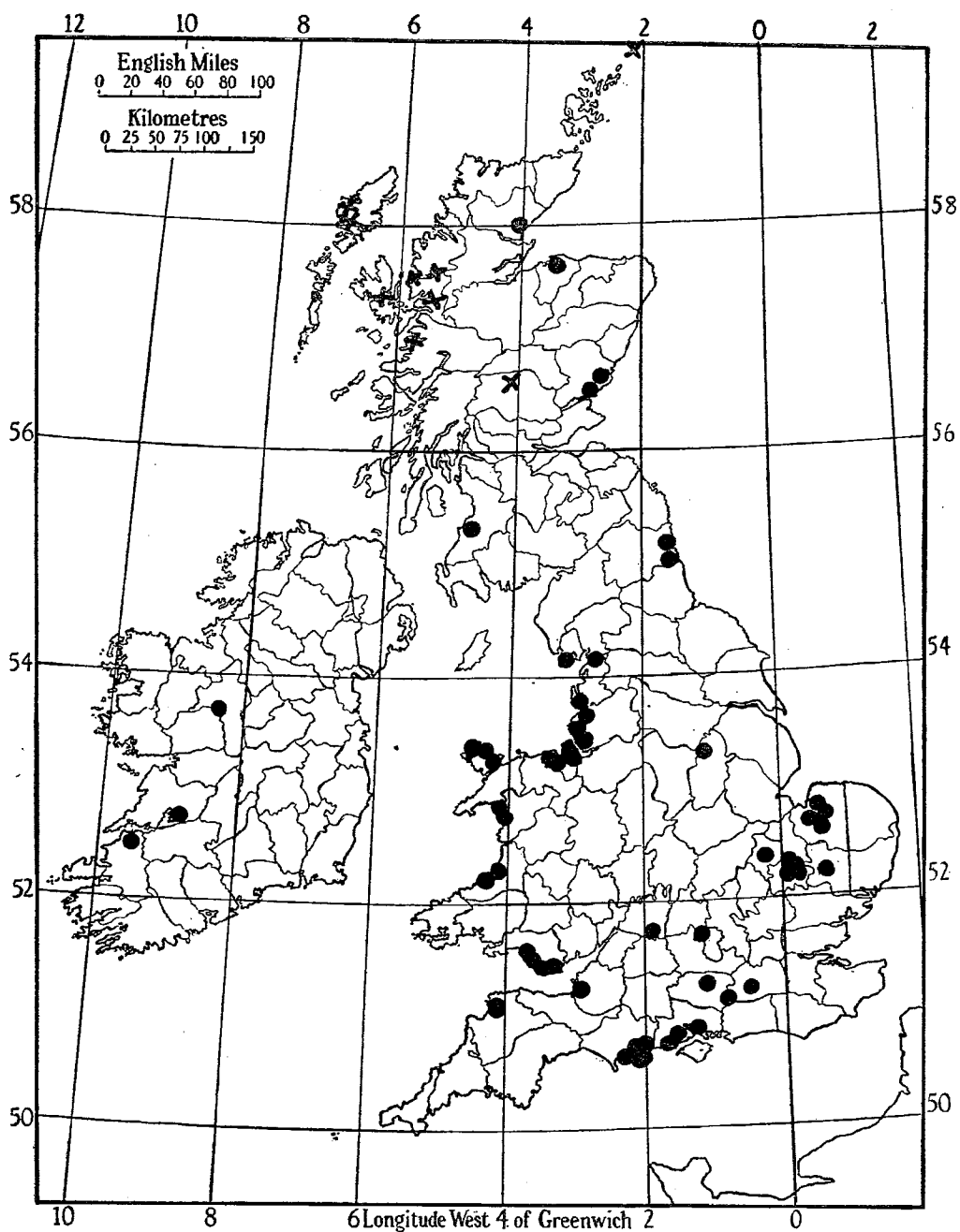
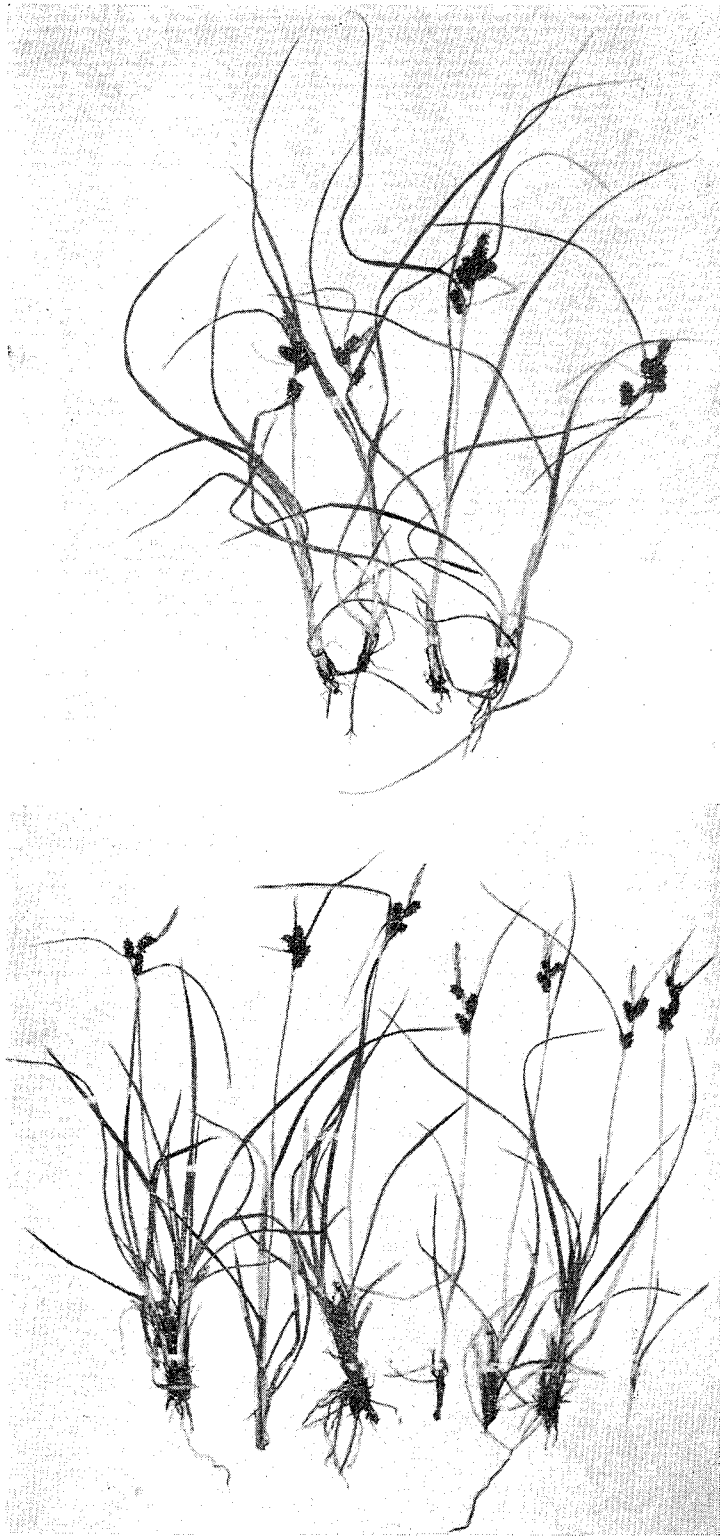


Fig. 2. The distribution of *C. serotina* Mérat ● ; *C. scandinavica* E. W. Davies ×.

PLATE 5.



(a) *C. serotina* Méral from L'Ancrese Common, Guernsey ($\times \frac{1}{3}$).

(b) *C. scandinavica* E. W. Davies from Fearnam Pier, Loch Tay, Perth ($\times \frac{1}{3}$).

46. CARD. : Ynyslas, 1948, P. W. Richards.
 48. MER. : Castle Harlech, 1880, C. Bailey.
 51. FLINT : shore of Llyn Helyg, 1906, J. A. Wheldon.
 52. ANGL. : Rhosneigr, 1949, A. P. Connolly; Cors Goch, 1951, P. W. Richards; Llyn Maelog, 1947, A. R. Clapham.
 56. NOTTS. : quarry near Shire Oaks, 1946, J. Brown.
 58. CHESHIRE : sandhills on shore, Wallasey, 1887, T. Smith; Oakmere, 1868, S. Bickham.
 59. S. LANCS. : coast sandhills, Formby, 1892, C. R. Billups; dune slacks, Ainsdale, 1937, J. E. Lousley; dune slacks, Southport, 1940, E. Dovaston.
 60. W. LANCS. : between Blackpool and St. Anne's, 1906, J. A. Wheldon.
 68. CHEVIOTL. : Ross Links, 1938, J. E. Lousley.
 69. WESTMORL. : Hale Moss, Bentham, 1952, E. W. D.
 75. AYR : Ardeer Sands, Stevenston, 1898, A. Somerville.
 90. FORFAR : Sands of Barry, 1916, E. S. Marshall; Rescobie Loch, 1882, G. C. Druce.
 95. ELGIN : Culbin Sands, 1938, N. Y. Sandwith.
 107. E. SUTH. : Cambusavie, Loch Fleet, 1931, J. E. Lousley.
 H. 9. CLARE : Lough Bunny, 1952, T. G. Tutin.
 25. ROSCOMMON : Annaghmore, 1952, T. G. Tutin.

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