

## Short Notes

### DIPSACUS STRIGOSUS WILLD. IN CAMBRIDGESHIRE, V.C. 29

*Dipsacus strigosus* Willd., a native of southern Russia and western Asia, was reported as an alien in Britain by Hansen (1963), and a later note by Gerrans (1964) tabulated the characters that separate it from *D. pilosus* L., which it closely resembles. *D. strigosus* is most easily distinguished from *D. pilosus* by the capitulum size, 30-45(-60)mm wide (15-25mm in *D. pilosus*) and the length of the receptacular bracts, 15-20(-30)mm (7-22mm in *D. pilosus*). These measurements are from Cambridgeshire material.

Hansen's records show that the plant has occurred as an alien in the vicinity of Oxford, Cambridge, Kew and Bristol, which suggests that it originated from the Botanic Gardens in the first three localities. Examination of material in the Cambridge University Herbarium (CGE) reveals three additional records from v.c. 29:

'Hinton, Cambridge 18 July 1828 J. S. Henslow' (as *D. pilosus*)

'Waste ground W. of Botanical Laboratory, Cambridge 18 July 1921 A. J. Crosfield' (as *D. pilosus*)

'Churchyard, Little St. Mary's church, Cambridge 1967 S. M. Walters' (as *D. strigosus*). Stock from this locality is now growing in the Cambridge Botanic Garden; otherwise the plant has not apparently been grown there in recent years.

In addition to these, in July 1974, J. O. Mountford found six plants of what proved to be *D. strigosus* on an earth tip on the west side of the Gogmagog golf course, 3½ miles south-east of Cambridge.

Crosfield's record above ties in with two given by Hansen: 'Waste ground near Botanic Garden, Cambridge 1863 F. J. Hanbury' (BM) and 'Waste ground, Cambridge 1908 R. S. Adamson' (BM); and also with a specimen collected by N. D. Simpson in 1913 on Coe Fen (BM). Coe Fen lies directly west of the Cambridge Botanic Garden. These records suggest that the plant has occurred as an alien in the south-western part of the City of Cambridge over a period of at least 112 years. Little St Mary's, where the plant was first recorded by W. B. Gourlay in 1949 (as *D. pilosus*—in card index of Cambridgeshire Flora in CGE), still supported the species in the less tended parts of the churchyard in 1974.

The Hinton record is the earliest so far traced for this species in the British Isles. Recent searches in the field have revealed that the plant still occurs in Lime Kiln Close, Cherry Hinton (2½ miles south-east of Cambridge city centre), presumably the area that Henslow referred to. In 1972 and 1973 there was one large flowering plant, in 1974 five flowering plants were found, and 23 rosettes were counted in February 1975. This increase is best interpreted as a response to the opening up of the habitat (heavily cloaked with *Clematis vitalba*) by children playing in the pit and making new paths. Thus *D. strigosus* may have been established at Cherry Hinton for 147 years, though recorded as *D. pilosus* for much of that time. It certainly justifies a place in our Floras.

Perring *et al.* (1964), who did not distinguish *D. strigosus*, listed five recent records for '*D. pilosus*'. Two of these (Little St Mary's and Cherry Hinton) are *D. strigosus* and of the others only that at Hildersham (9 miles south-east of Cambridge) can be confirmed as true *D. pilosus* by a specimen in CGE. *D. pilosus* has recently been rediscovered in Bottisham Park (7 miles north-east of Cambridge).

It will be interesting to record the persistence of *D. strigosus* in its present sites in v.c. 29 and any further spread. Does it persist elsewhere, e.g. near Oxford, Kew or Bristol? Is it still unrecognized in other sites?

#### ACKNOWLEDGMENTS

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A. C. LESLIE

*RUBUS PLATYACANTHUS* MUELL. & LEFÈV. AND ITS ALLIES IN BRITAIN

In Newton (1974) I gave specific rank to *Rubus carpinifolius* var. *laxus* Sudre under the name *R. laxissimus*, based on A. Ley's gathering from Mitcheldean Meend (v.c. 34) named by Sudre and issued as his *Rubi rari* no. 3.

At the same period Professor H. E. Weber was researching the *R. carpinifolius* group of brambles, during which he referred several of the sheets in BM cited by me as examples of *R. laxissimus* to *R. platyacanthus* Muell. & Lefèv. Further, he was of the opinion that many British and German specimens named *R. carpinifolius* by Focke, Rogers and others in the past should also be called *R. platyacanthus*, claiming in support the view of A. Neumann, a distinguished German botanologist, who had verified *R. platyacanthus* in its *locus classicus* in France.

Weber (1973) has renamed as *R. adpersus* Weihe ex Weber the plant formerly known as *R. carpinifolius* Weihe & Nees, since this name had previously been used (by J. & C. Presl) for a different taxon. In this article he described the features distinguishing the two taxa, emphasizing the stouter, denser stem-prickles, the ovate, gradually acuminate terminal leaflet and gland-dotted bracts in the panicle as characters of *R. adpersus*, and the elliptical, shortly cuspidate leaflets with rounded rather than subcordate bases, the sparser, rather finer stem armature and the eglandular panicle-bracts in *R. platyacanthus*.

In the light of these investigations, and following inspection in company with Professor Weber of both species growing in Germany, I have re-examined many British sheets of *R. laxissimus* and *R. carpinifolius* with the holotype of *R. platyacanthus* (Lefèvre, Forêt de Retz, France, 1856, as *R. nitidus*, hb. P. J. Müller in LAU) in front of me. Most of the British material named *R. carpinifolius* is indeed exactly *R. platyacanthus*, and despite slight variations in terminal leaflet-shape and indumentum in *R. laxissimus*, and the consistently broad panicles, I am now convinced that these features are not sufficient to support a distinct taxon at specific rank; *R. laxissimus* is also to be included within *R. platyacanthus*.

What is the relative status of *R. platyacanthus* and *R. adpersus* in Britain? Examination of sheets in several herbaria indicates that *R. platyacanthus* is by far the more widespread and common of the two; I have seen specimens either in the field or herbarium from v.c. 11-19, 21-24, 27, 30, 34-36, 38-40, 43, 53-59 and 62-64. *R. adpersus* appears to be confined to the areas of Flitwick Moor (v.c. 30), Milford Heath (v.c. 17, the specimens of '*R. carpinifolius* flore roseo' collected and issued as Set of British Rubi no. 28), Holme and Woodwalton Fens (v.c. 31), and the ancient Knutsford Heath (v.c. 58); doubtless it is present in other localities, but before this can be established a more comprehensive review of the available specimens will be necessary.

In the herbarium, specimens of the two are sometimes difficult to distinguish, particularly on badly collected or incomplete sheets. In the field, however, they can often be distinguished at a glance: *R. platyacanthus* exhibits a uniformly fresh green appearance, whereas *R. adpersus* has a characteristic yellowish-green cast (at least in the open) due to the reddish-spotted pigmentation of stems and panicles reflected in the name *adpersus*; also the petals are pale pink or pink-tinted, unlike those of *R. platyacanthus* which are nearly always pure white.

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A. NEWTON

## NOTES ON SOME WOOL-ALIEN CYPERACEAE FROM BLACKMOOR, N. HANTS.

The Cyperaceae form a huge natural family, with some 90 genera comprising 4,000 species, and are especially well represented in both temperate and warmer regions of the world where sheep are reared. Very few species have been recorded as wool-aliens in the British Isles, e.g. one species of *Cyperus* by Hayward & Druce (1919), two species of *Cyperus* by Lousley (1961), one species each of *Cyperus* and *Carex* by Dony (1969) and two species of *Carex* by Jermy & Tutin (1968), although on the Continent Probst (1949) listed about 20 species, and several other more recent records are scattered through the literature. The rather surprising lack of records is probably due to the ease with which different species in the field may be overlooked, because in the early vegetative stage many Cyperaceae look alike, and also to the difficulty in getting mature specimens for identification.

During the past six years (1969–1974) over 30 species have been collected from Blackmoor, N. Hants (v.c. 12), and these are listed below together with a few earlier records. Relatively few species were seen flowering in the field, the remainder having been cultivated under glass to protect them from frost. Many proved difficult to grow successfully, and took several years to produce even one inflorescence. For satisfactory determinations it is essential to obtain mature fruiting material with good rootstocks, especially in *Cyperus* and *Carex*. Several plants have not yet flowered and remain undetermined.

A number of *Carex* species which are common British natives have been included, since these occurred regularly with undoubted wool-aliens. The geographical distributions of the species are mostly taken from the monographs by Kükenthal (1909, 1935), but it is likely that they have been introduced into many other countries, e.g. Australia and S. America. For *Carex*, the more recent accounts by Nelmes (1944), on Australian, and by Moore & Edgar (1970), on New Zealand species, have proved very useful. Voucher specimens are in my herbarium, and also some (K) at Kew.

## CYPERUS L. 550 species

- C. clarus* S. T. Blake Australia 1971 (K) det. SSH
- C. congestus* Vahl Originally S. Africa, widespread Frequent (K) det. SSH
- C. dactyloides* Benth. Australia 1973 det. SSH
- C. eragrostis* Lam. (*C. vegetus* Willd.) Originally S. America, widespread Frequent det. SSH
- C. esculentus* L. Widespread 1973 conf. SSH
- C. gunnii* Hook. f. Australia 1971, 1972 (K) conf. SSH
- C. longus* L. var. *tenuiflorus* (Rottb.) Kük. Widespread AB and MMcCW 1973 det. JEL
- C. luzulae* (L.) Retz. S. America 1973 (K) conf. SSH
- C. ovalaris* (Michx.) Torr. U.S.A. 1971 det. TBR
- C. rigidifolius* Steud. E. Africa 1973 (K) conf. SSH
- C. rotundus* L. Cosmopolitan 1971 det. SSH
- C. rutilans* (C. B. Clarke) Maiden & Betche Australia ACL, TBR 1969 (K) det. DMN
- C. sporobolus* R. Br. N. Australia 1973 conf. SSH
- C. tenuis* Schwartz S. and tropical Africa, Mexico, S. America 1971 (K) det. SSH
- C. ustulatus* A. Rich. New Zealand 1971 det. SSH
- C. vaginatus* R. Br. Australia MMcCW 1964; 1970, 1973 conf. SSH

## KYLLINGA Rottb. 60 species

- K. brevifolia* Rottb. Widespread in warm regions 1971; 1973 det. SSH
- K. erecta* Schum. Africa 1972 (K) det. SSH
- K. odorata* Vahl Africa and America AB 1973 conf. SSH

## SCIRPUS L. 300 species

- S. holoschoenus* L. Europe, Asia and the Mediterranean MMcCW c 1969
- S. nodosus* Rottb. S. Africa, S. America, Australia and New Zealand TBR, ACL 1971 (K) conf. SSH

## ELEOCHARIS R. Br. 200 species

- E. nodulosa* (Roth) Schultes S. America 1971 det. TBR

## BULBOSTYLIS Kunth 100 species

- B. humilis* Kunth S. Africa MMcCW 1964; 1972, 1973 (K) conf. SSH

- B. striatella* C. B. Clarke E. and S. Africa 1969, 1973 det. EJC  
 CAREX L. Over 1,500 species  
*C. appressa* R. Br. Australia, New Zealand, New Guinea and New Caledonia MMcCW 1968; 1971  
*C. devia* Cheesem. New Zealand 1971 det. SSH  
*C. flacca* Schreb. Europe, W. Asia, N. America, introduced in New Zealand Frequent  
*C. flagellifera* Col. New Zealand 1972 det. SSH  
*C. hirta* L. N. temperate regions 1971 det. EJC  
*C. hubbardii* Nelmes Queensland 1972 conf. SSH  
*C. inversa* R. Br. Australia and New Zealand 1971  
*C. muricata* L. N. temperate regions Frequent conf. SSH  
*C. ovalis* Good. N. temperate regions, introduced in New Zealand Frequent  
*C. secta* Boott New Zealand MMcCW 1964 det. SSH  
*C. solandri* Boott New Zealand MMcCW 1970 det. SSH  
*C. tereticaulis* F. Muell. Australia MMcCW 1968; 1972 conf. SSH  
*C. virgata* Sol. ex Boott New Zealand MMcCW 1968; 1969 (K) det. SSH  
*C. vulpinoidea* Michx. N. America, Colombo, naturalized in Europe 1968 (K) det. SSH

Key to initials used in the list:

AB	A. Brewis	EJC	E. J. Clement	SSH	S. S. Hooper
ACL	A. C. Leslie	JEL	J. E. Lousley	DMN	D. M. Napper
TBR	T. B. Ryves	MMcCW	M. McCallum Webster		

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T. B. RYVES

#### NOTES ON SOME WOOL-ALIEN MALVACEAE

The Malvaceae form a moderately large family (1,000 species in 75 genera) in tropical and temperate regions. Many species have big, handsome flowers and are commonly grown in gardens, including *Hibiscus trionum* L., which is also one of our most attractive wool-alien plants.

Probst (1949) listed 26 species of Malvaceae which were associated with shoddy on the Continent, and 14 species from Britain were listed by Lousley (1961). Most of the latter have recurred in the

past six years in the two areas at present under review, but the purpose of this note is to give records only of species which were either not included or noted only once in Lousley's list. Several of them have also been recorded more recently by Dony (1969). *Modiola* appears to have been previously recorded as a British wool-alien only by Hayward & Druce (1919), from Galashiels 60 years ago.

The commonest wool-alien species were *Malva parviflora*, *M. sylvestris* and *M. neglecta* (the two latter, however, possibly being native weeds), followed by *Sida spinosa*, *S. cordifolia* and *Pavonia*. The *Sida* species hardly ever flowered in the field, although in the exceptionally fine hot summer of 1973 several very large plants of *S. rhombifolia* flowered freely and set good fruit at Blackmoor. Most of the alien Malvaceae were sensitive to slight or moderate frost, but nearly all the attempts made to grow them on through the winter were abortive, and several new species died before they could be induced to flower and hence identified. Exceptionally, *Pavonia* and *Modiola* proved relatively easy to cultivate and grew strongly under glass.

The following 12 species were found at Blackmoor, N. Hants., v.c. 12, and Maulden, Beds., v.c. 30. Records are my own unless otherwise stated.

**ABUTILON** Miller Over 100 species

*A. malvifolium* (Benth.) Domin Australia Blackmoor 1973

**MALOPE** L. 4 species

*M. trifida* L. W. Mediterranean Maulden 1969 E. J. Clement & T. B. Ryves

**MALVA** L. 40 species

*M. neglecta* Wallr. Europe Blackmoor and Maulden Common, perhaps native

*M. sylvestris* L. Europe Blackmoor and Maulden Common, perhaps native

**MALVASTRUM** A. Gray 12 species

*M. multicaule* (Schlecht.) Britton S. America Blackmoor and Maulden Single plants in several years

*M. peruvianum* (L.) A. Gray (?) S. America Blackmoor 1970 det. C. C. Townsend

**MODIOLA** Moench 1 species

*M. caroliniana* (L.) G. Don America, naturalized in Australia, S. Africa and Asia Blackmoor 1970, 1973

**PAVONIA** Cav. 200 species

*P. urens* Cav. Africa Blackmoor A few plants in most years

**SIDA** L. 200 species

*S. cordifolia* L. Tropics Blackmoor A few plants in most years

*S. rhombifolia* L. Tropics Blackmoor 1973, 1974

*S. spinosa* L. Tropics Blackmoor A few plants in most years

**UROCARPIDIUM** Ulbr. 11 species

*U. shepardae* (Johnst.) Krapov. S. America Maulden 1969 E. J. Clement, J. L. Mason & T. B. Ryves det. C. C. Townsend

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T. B. RYVES

## NOTES ON TWO ALIEN VULPIAS IN BRITAIN

Townsend (1959) first reported the presence in Britain of *Vulpia australis* (Steudel) Blom, an alien from South America. This addition to the British list was based on a gathering by C. W. Bannister and C. C. Townsend in 1955 from the docks at Sharpness, W. Gloucs., v.c. 34, of which we have seen material in K and herb. J. E. Lousley. Townsend appears to have identified *V. australis* by comparing his specimens with material so-determined in K, where there are several sheets from South America of plants agreeing with the Sharpness specimen and labelled *V. australis* (in particular by the American agrostologist A. S. Hitchcock). Such plants do not, however, agree with the original description nor with the type-specimen of this species.

*V. australis* (Steudel) Blom is based on *Festuca australis* [Nees ex] Steudel, which was in turn based on *Festuca tenella* var.  $\alpha$  Nees, non Willd. The description given by Nees (1829) mentions few characters which one could use to separate the closely related species in the section *Vulpia* of the genus *Vulpia*, but he described the lower glume as half as long as the lowest lemma on the same side, and the upper glume as about as long as the lowest lemma on the same side. Taken in their strict application these features agree very closely with those of *V. bromoides* (L.) S. F. Gray, but less so with those of other related species or with those of the Sharpness specimen. The only specimen cited by Nees was collected by Sellow at Montevideo and seen by Nees in B. No such specimen exists at B now, but a duplicate of it, sent from B in 1840 (after Nees' publication), is at K. It is clearly *V. megalura* (Nutt.) Rydb., a taxon to which Nees' description does not strictly apply, and quite different from the Sharpness plant. The true identity of *V. australis* as understood by Nees is thus uncertain, and will be discussed by us more fully in a later paper.

The Sharpness specimen is a typical representative of the plant generally known as *V. hybrida* (Brot.) Pau or *V. broteri* Boiss. & Reut., a western Mediterranean species which is widely naturalized in South America, and Townsend's (1959) description gives a good idea of the differences between it and *V. bromoides*. Several other British specimens, mostly wool-aliens, have been identified as *V. australis* since 1959, and the name has been used in the literature (e.g. Lousley 1961). All specimens we have seen so-labelled have been referable to *V. broteri*, or (presumably representing mis-identifications) to *V. bromoides*, *V. myuros* (L.) C. C. Gmel. or *V. megalura*, all of which occur as aliens in South America. We have seen material of *V. broteri* from Scilly, v.c. 1a; N. Hants., v.c. 12; W. Kent, v.c. 16; Beds., v.c. 30; and W. Gloucs., v.c. 34.

The correct name for *V. broteri* (*V. hybrida*) is, however, *Vulpia muralis* (Kunth) Nees, a combination based on *Festuca muralis* Kunth, which was in turn based by Kunth on his own earlier concept of *F. myuros* L. (*V. myuros*) as it occurred in South America, but which he came to believe was a distinct species. There is an isotype of *F. muralis* (from garden walls, Quito, Ecuador) in BM, and it is a perfect match for the European *V. broteri*. The name *F. muralis* was published in 1822 and easily predates *V. broteri* or *V. hybrida*.

*Vulpia megalura*, the second subject of this note, has been known as a wool-alien species in Britain for many years. It was described (as *Festuca megalura* Nutt.) from Californian material, and it is very widespread in both North and South America. Nevertheless it is scattered throughout the European and North African range of *V. myuros*, to which it is very closely related, in places where it is most unlikely to have been introduced (in contrast to its casual status in Britain), and we are convinced that it was introduced to America from the Mediterranean region. The same conclusion has been recently reached by Lonard & Gould (1974).

*V. megalura* differs from *V. myuros* only in its lemmas, which are ciliate distally. Such variation is found in several species of *Vulpia*, and we fully agree with Lonard & Gould (1974) that the two taxa are conspecific. Lonard & Gould included *V. megalura* in *V. myuros* var. *hirsuta* Hackel. However, we consider that the rank of forma is more appropriate, and the combination *V. myuros* f. *hirsuta* (Hackel) Blom already exists (Blom 1934). But the basionym *V. myuros*  $\beta$  *hirsuta* Hackel referred to a Portuguese plant with dorsally hairy (not marginally ciliate) lemmas (Hackel 1880). Plants of this sort are also scattered throughout the range of *V. myuros*, and we consider them to represent a distinct forma.

Therefore we wish to make a new combination for plants previously known as *V. megalura*:

*Vulpia myuros* (L.) C. C. Gmel. f. *megalura* (Nutt.) Stace & Cotton, comb. et stat. nov.

*Festuca megalura* Nutt., J. Acad. Nat. Sci. Philadelphia, 2(1): 188 (1847)

It is interesting to note that these two plants, *V. muralis* and *V. myuros* f. *megalura*, are both

Mediterranean taxa which have become naturalized in America, were both first named in America, and have both been re-introduced into Europe as wool-aliens from America.

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C. A. STACE & R. COTTON

*FESTUCA GLAUCA* AUCT. AND *FESTUCA CAESIA* SM.

In a recent paper (Trist 1973), I discussed the glaucous fescue confined to a limited area of the Suffolk Breckland. It had been considered that one species with two varieties could be identified, but the results of a field study showed that only one taxon should be recognized.

As pointed out in that paper, the uncertainty of the identification of this glaucous Breckland fescue has been a contention of botanists for over 160 years. Smith (in Sowerby & Smith 1808), who studied this plant and collected it from the Breckland site, gave it specific rank as *Festuca caesia* Sm. and after much study concluded that it was quite distinct from *Festuca ovina* L. and *Festuca duriuscula* auct. (*F. longifolia* Thuill.). Hackel (1882) placed both of the varieties referred to by Trist (1973) under *Festuca ovina sensu lato*, as *F. ovina* subsp. *eu-ovina* var. *glauca* (Lam.) Hack. and *F. ovina* subsp. *eu-ovina* var. *glauca* subvar. *caesia* (Sm.) Hack. Richter (1890) similarly subordinated Smith's *F. caesia* to *F. glauca* Lam. as *F. glauca* Lam. e. *caesia* (Sm.) K. Richter, which has been regarded as a subspecies by some (e.g. Auquier 1973) and as a variety by other authors (e.g. Hubbard 1954).

In the circumstances, it seems reasonable to doubt that a comparison of the English and Continental glaucous fescues has been fully made; in fact it must be admitted that a full understanding of the taxonomy of this group of glaucous fescues has still not been reached. Dr P. Auquier of Liège University (1973 *in litt.*) has told me that the date of Lamarck's description of *F. glauca* was 1788 and not 1786, as previously thought. This was one year later than the notes published on *F. glauca* by Villars (1787). Villars would have known of Lamarck's work, but were the plants described by each of them the same or different? Auquier (1973 *in litt.*) also informed me that his studies have conclusively shown that *F. glauca sensu* Villars has distinct differences from the Breckland plants and also from the plants of the *locus typicus* of Lamarck in the Massif Central; Lamarck's plants also differ from those found in the Suffolk Breckland.

Auquier (1973) discussed the Suffolk plants and those from the *loci typici* of Villars and Lamarck and presented the results of a very detailed study. He has made a valuable contribution to our knowledge of this group of glaucous fescues. It now appears clear that the two fescues of Villars and Lamarck cannot both be referred to the same taxon; also it is shown that the Breckland fescue is different from either. It therefore follows that the name of the Breckland plant must be reconsidered. In considering the present state of our knowledge of the *F. ovina* group, Auquier (1973 *in litt.*) has suggested that the Breckland fescue be referred to the original name given by J. E. Smith, i.e. *F. caesia* Sm.

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