

## Short Notes

### CORRECT NAME OF INLAND RADIATE PLANTS OF *SENECIO VULGARIS* L.

In his recent paper on this taxon Hull (1974) refers to it as 'subsp. *vulgaris* forma *lingulatus* [sic] D. E. Allen (Allen 1967)'. No such name, however, appears in the paper cited - in which var. *hibernicus* Syme and forma *radiatus* Hegi were identified as the apparently valid alternatives, depending on which rank was preferred.

The error is doubtless attributable to the use by Perring & Sell (1968) of 'subsp. *vulgaris* forma *ligulatus* D. E. Allen'. This name was taken, unbeknown to me, from the proof of my 1967 paper ahead of publication. Last-minute enquiry subsequent to this revealed that the proposal of a new name at the level of the forma was superfluous and it was accordingly dropped from the version that appeared in print. Its accidental incorporation in the literature has evidently been giving rise to confusion, and it may therefore be as well to stress that 'forma *ligulatus*' and 'forma *lingulatus*' have no validity and should be disregarded.

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D. E. ALLEN

### SIGESBECKIA JORULLENSIS H., B. & K. - THE CORRECT NAME FOR *S. CORDIFOLIA* H., B. & K.

Eight years ago (Brummitt 1967) I drew attention to the fact that the commonest species of *Sigesbeckia* naturalized in the British Isles is not *S. orientalis* L., as had long been thought, but a different species which I called *S. cordifolia* H., B. & K., a native of Central and South America. While preparing that note I investigated the American material of the genus at K and came to the tentative conclusion that *S. cordifolia* H., B. & K. and *S. jorullensis* H., B. & K. were conspecific. Both these two names were published simultaneously by Humboldt *et alii* (1820) (pp. 283 and 284 respectively) and the correct name when such species are regarded as conspecific is that adopted by the first author to formally combine them. Despite extensive searching in the literature I was unable to find that this had ever been done, so that apparently both names were equally correct (which, incidentally, is a situation contrary to Principle IV of the *International Code of Botanical Nomenclature*). I therefore adopted the name *S. cordifolia* for the species, in conformity with that used by Henker (1965) in his extensive paper on the genus in Europe, but I did not cite *S. jorullensis* as a synonym. However, McVaugh & Anderson (1972), in a comprehensive account of the North and Central American species of the genus, have also (p. 491) concluded that the two species are conspecific but have adopted the name *S. jorullensis*, giving *S. cordifolia* as a synonym. This now fixes the correct name for the species as *S. jorullensis* H., B. & K., and it will appear as such in *Flora Europaea*, 4. The epithet '*jorullensis*' is derived from the volcano Jorullo in Mexico, where the original collection was made.

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R. K. BRUMMITT

### NOTES ON *HIERACIUM* FROM FLINT AND EASTERN DENBIGH

After a recent move to Chester, particular but not exhaustive attention has been paid by one of us (T.E.) to the collection of hawkweeds in nearby parts of Wales for determination by the other (J.N.M.), who has also paid two visits to the area. The scarcer species were determined in collaboration with P. D. Sell.

The main part of Flint (v.c. 51), except the Vale of Clwyd, and parts of Denbigh (v.c. 50) adjacent to its south-eastern bulge were extensively explored. This small area, equivalent only to about six 10 km squares, sustains the 11 species listed and possibly a few more not yet collected in the mature state.

Of these 11 species, four from v.c. 51, *H. britanniciforme*, *H. holophyllum*, *H. oistophyllum* and *H. salticola*, are not recorded from this vice-county in the *Critical Supplement* (Perring & Sell 1968), and only one of those recorded in the *Critical Supplement* from a 10-km square wholly within the vice-county, *H. subcrocatum*, is absent from our list. A number of other species are, however, recorded from squares intersected by the vice-county boundary, and there are some 20 species absent from our list which from their overall distribution might reasonably be expected. The Flint limestone includes many cliffs and scree-slopes offering ideal habitats for hawkweeds, and it appears to be an underworked area which would repay further exploration.

558/1/73. *H. britanniciforme* Pugsl. On limestone cliffs and scree west of Mold. Associated plants include *Anthyllis vulneraria*, *Helianthemum chamaecistus*, *Poterium sanguisorba*, *Scabiosa columbaria* and *Thymus drucei*. Evidently native in Flint, *H. britanniciforme* also occurs in Denbigh and on the limestone around Llandudno, Caernarvon.

v.c. 51: GR 33/1.6, NMW and herb. J.N.M.

558/1/118. *H. oistophyllum* Pugsl. Locally common, mainly on firm soil over limestone, by woodland paths and borders in mid-Flint and above Nant-y-Ffrith, Denbigh. Other plants in such habitats include *Aquilegia vulgaris* and *Epipactis helleborine*. *H. oistophyllum* occurs on limestone from Yorkshire northwards but has not previously been reported from Wales. The recent records of this and *H. holophyllum* were made without prior knowledge of sheets of both species, collected from the same district of Flint around 70 years earlier, lying undetermined at Liverpool.

v.c. 50: GR 33/2.5, NMW and herb. J.N.M.

v.c. 51: GR 33/1.6, W. S. Laverock, 1901, LIV; NMW and herb. J.N.M.

558/1/143. *H. caledonicum* F. J. Hanb. Ledges on low limestone cliffs. Recent records for Flint (Watsonia, 8: 308 (1971)) are errors for *H. holophyllum*.

v.c. 50: GR 33/1.5, herb. J.N.M.

558/1/145. *H. holophyllum* W. R. Linton. At the two *H. oistophyllum* localities but less frequent. More prevalent on open, grassed, limestone slopes below summit drift

deposits with *Coeloglossum viride*, *Helictotrichon pubescens*, *Orchis morio*, *Polygala vulgaris*, *Primula veris* and *Thalictrum minus*.

v.c. 50: GR 33/2.5, herb. J.N.M.

v.c. 51: GR 33/2.6, R. Brown, 1894, LIV

GR 33/1.6, NMW and herb. J.N.M.

558/1/149. *H. vulgatum* Fr. Widespread and evidently native in limestone areas on cliffs, rubble, scree, grassland and scrub; less robust on old lead-mine spoil. Also on millstone grit faces in cuttings, on railway ballast and verges, dockside walls and disused sand-quarries.

v.c. 50: GR 33/1.5, herb. J.N.M.; 33/2.5, herb. T.E.; 33/2.6, 3.5, NMW

v.c. 51: GR 33/0.7, 1.8, 2.7, 3.6, NMW; 33/1.6, herb. J.N.M.; 33/2.5, 2.6, 3.5, herb. T.E.

558/1/158. *H. diaphanum* Fr. Widespread. Apparently native in open woodland and on rock-ledges on limestone, and in gritty sites near water or not far above the water-table. In Denbigh it occurs by the old Llay railway at the base of a clay bank; and in Flint on flushed clay at Bodfari, in railway bank woodland at Nannerch, on railway banks above ditches at Bagillt and Padeswood and on walls by the River Dee at Saltney.

v.c. 50: GR 33/3.5, NMW

v.c. 51: GR 33/1.6, herb. J.N.M.; 33/0.7, 2.6, 2.7, 3.6, NMW

558/1/163. *H. strumosum* (W. R. Linton) A. Ley. Common; in 14 Flint tetrads. Apparently native in open woodland, wood borders, deep hedgebanks and scrub and on shaded rocks. Elsewhere it is commonly introduced in open industrial situations such as waste lime-beds, railway ballast and verges, sand-pits and, usually in a stunted form, on old lead-mine spoil and other metalliferous tips, often with *H. vulgatum*.

v.c. 50: GR 33/1.6, herb. T.E.; 33/2.5, 3.5, NMW

v.c. 51: GR 33/1.6, 1.8, NMW; 33/1.7, 2.5, 2.6, 3.6, herb. T.E.

558/1/203. *H. eboracense* Pugs. Locally common on derelict colliery waste-land at Llay, Denbigh, showing the variation in leaf arrangement associated with this species. Introduced, presumably from its native areas in South Wales or northern England.

v.c. 50: GR 33/3.5, NMW and herb. J.N.M.

558/1/219. *H. perpropinquum* (Zahn) Druce. Frequent but late flowering and probably under-recorded in consequence. Characteristic of limestone scrub and developing scrub in disused quarries and railway cuttings, and by railways in areas of base-rich clay or calcareous sand.

v.c. 50: GR 33/2.5, herb. T.E.; 33/3.5, NMW

v.c. 51: GR 33/0.7, 1.6, NMW; 33/1.7, 2.5, herb. T.E.

558/1/222. *H. salticola* (Sudre) Sell & West. On the Flint coastal dunes at Prestatyn, and on a railway bank at Connah's Quay.

v.c. 51: GR 33/0.8, NMW and herb. J.N.M.; 33/3.6, herb. J.N.M.

558/1/223. *H. vagum* Jord. Scattered but probably under-recorded like *H. perpropinquum*, and for similar reasons. In Denbigh it occurs along a wooded railway cutting and on a gorse common and in Flint among gorse on a hillside and on coastal dunes and industrial tips.

v.c. 50: GR 33/2.5, 3.5, NMW

v.c. 51: GR 33/0.8, NMW

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T. EDMONDSON & J. N. MILLS

# THE DECLINE OF *VICIA SATIVA* L. *SENSU STRICTO* IN BRITAIN

20 years ago plants known as 'Common Tare' or 'Common Vetch' (*Vicia sativa* L. *sensu lato*) in Britain were commonly assigned to three taxa (*V. sativa* L. *sensu stricto* and two varieties of *V. angustifolia* L.) and a key to the Wiltshire plants was put forward by me in Grose (1957). This key agrees fairly well with that of Mettin & Hanelt (1964) (Killick 1973).

In these keys and those of Coste (1901) and Ball (1968) *V. sativa* L. *sensu stricto* is defined as having large flowers (over c 18 mm long) and broad (over 6 mm), brown pods, but very few recent British specimens show these characters. Within the group as a whole only 5% of my specimens (1949-50) are *V. sativa sensu stricto*; in Wiltshire material I examined in 1950 and in material I examined at BM in 1972 and 1973 the proportion is similarly small. I have seen no undoubted plant of *V. sativa sensu stricto* in the field since 1952.

An explanation lies in the decreasing sowing by farmers of vetches as a fodder crop (Table 1). By 1958 (Coppock 1964) 91% of the 1891 'vetches or tares' acreage in

TABLE 1. ACREAGES OF FARMLAND IN ENGLAND AND WALES SOWN TO 'VETCHES OR TARES'

Taken from Coppock (1964)

Year	Thousands of acres
1891	216
1901	148
1911	103
1921	103
1931	64
1935	54
1944	50
1958	19

England and Wales had been planted with some other crop. The vetch crops, restricted by 1958 to 19,000 acres, accounted for only 0.2% of the total tillage area and 0.08% of that assigned to arable and grassland. They were declining sharply in their remaining strongholds, eastern England (where they were supposedly favoured by calcareous boulder clays) and southern England.

This simple picture may have been locally complicated by 'mixed corn' which, although primarily consisting of barley, wheat, oats, peas and beans for livestock, could also by definition include vetches. The mixed corn acreage was 271,000 in 1958, mainly in the western half of England and Wales, and most prominent in Cornwall; it has since fallen to below half this value (Table 2).

TABLE 2. ACREAGES IN ENGLAND AND WALES INCLUDING A VETCH COMPONENT

Taken from *Agricultural Statistics in England and Wales*  
(Ministry of Agriculture, Fisheries and Food) (1969-71)

Year	Thousands of acres	
	'Other crops for stock feeding'	'Mixed Corn'
1961	41	142
1966	23	67
1971	21	118

The vetch acreage was last separately itemized in *Agricultural Statistics* (as 19,000 acres) in 1960, but from 1961 was relegated to the miscellaneous 'other crops for stock feeding' (Table 2). At that time vetches probably comprised just under half this category, acreages of which have since fallen by half.

Even when replenished from regular sowing *V. sativa sensu stricto* seldom persists, and evidence presented earlier in this note indicates that it is now becoming scarce in Britain; any claims to have found it recently need checking. Changes in crop acreages appear not to have similarly affected *V. angustifolia*, although its var. *segetalis* has also often been cultivated. At least in southern England, where its narrow black pods are numerous and well-formed, this variety appears to maintain itself without any addition from agriculture.

#### ACKNOWLEDGMENTS

My thanks are due to the late Mr J. D. Grose who introduced me to the problem, and to Mr G. Bridson for help with literature.

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H. J. KILLICK

#### A NOTE ON *FASCICULARIA*, *OCHAGAVIA* AND *RHODOSTACHYS*

Knowledge of the Chilean Bromeliads (Bromeliaceae - the pineapple family) to be seen outside gardens in our islands varies from absolutely nothing to uncertain bewilderment.

Two species have a claim to inclusion in our lists. Although they will have been originally planted, and do not ripen seeds, they persist indefinitely on their own in our most clement parts, preferably in warm, sandy places. There they grow ever thicker, tougher, spinier, and more fearsome to tackle, ousting competition, i.e. they are naturalized.

All the plants of this group have densely fascicled (hence the generic name *Fascicularia*), long, narrow, stiff leaves up to 2 feet long with upwardly directed, cartilaginous, spinous projections along each margin, their rosettes forming a tightly packed clump about 2 feet high and 6 to 8 feet or more across. The names that have been used for the wild British plants are *Fascicularia pitcairniifolia* (Hort. Berol. ex Verlot) Mez and *F. littoralis* (Phil.) Mez.

*Fascicularia pitcairniifolia*. P. Clough, the Head Gardener at Tresco Abbey Gardens, Isles of Scilly, finds he can tell this species by its leaves being convex or flat and grey-green above, and concave and whitish below. The lower part of the leaves surrounding an inflorescence turns bright red when the shoot in question flowers - hence the old generic name of *Rhodostachys*. The inflorescence is dense and virtually sessile, with blue bracts which are shorter than the flowers. The flowers are blue and at least 40 mm long with petals which are ligulate at the base, and yellow anthers. In Scilly this grows right down to the edge of the sea in St Mary's, and in the valley near the rubbish dump outside the Abbey Gardens at Tresco, but not on Appletree Banks, as stated by



Lousley (1971). It is also the plant on Belle Isle, Brittany, France, referred to in the same work, as H. Heine tells me. It was found there in 1958 by J. and A. Raynal. In Guernsey there is a lusty clump by Rocquaine Bay and two others in the Fermain Valley.

*Fascicularia littoralis*. This name refers to a species which differs from the last in its outer bracts exceeding the flowers. Its sepals are linear with an obtuse, cucullate apex, and its leaves, P. Clough finds, are concave above. It seems, however, that all the wild British records under this name should be referred to *Ochagavia carnea* (Beer) Smith & Looser (*O. lindleyana* Mez), the name *F. littoralis* having thus been long misused.

*Ochagavia carnea*. This has inflorescences with stalks at least 6 inches long, eligulate, pink petals, and prominently exerted stamens. In addition, unlike the first species, P. Clough finds the leaves are concave above and never redden. This is the species to be seen quite plentifully on Appletree Banks on Tresco and it is common in the Gardens there. As well as the depictions and notes in Chittenden (1951) there is a fine coloured illustration in Everard & Morley (1970).

#### ACKNOWLEDGMENTS

I am grateful for assistance with this note to Mr P. Clough, Dr H. Heine, Dr B. D. Morley and Mr D. Philcox.

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D. MCCLINTOCK

#### THE DISTINCTION BETWEEN *OXALIS CORNICULATA* L. AND *O. EXILIS* A. CUNN.

Variants of Procumbent Yellow Sorrel, *Oxalis corniculata* L., especially those with purple-suffused leaves, are common garden weeds. Warburg (1952) did not mention any infraspecific taxa in this variable species, but in the second edition of the same work (Warburg 1962) he included var. *microphylla* Hook. f., a distinct, small variety which always has short capsules and single-flowered inflorescences. Young (1958) and Warburg (1962) have remarked that this variety should probably be regarded as a subspecies. It is clearly the plant from Worthing figured by Butcher (1961) as *O. corniculata*. Young (1968) later treated *O. corniculata* var. *microphylla* as a species, using the name *O. exilis* which A. Cunningham had given in 1839 to a New Zealand plant.

Before I was aware of the late D. P. Young's work I had been comparing these two taxa, which occur together outdoors without any intermediates in my own and my neighbours' gardens in Dorking on the Lower Greensand, and I noticed that the small taxon, *O. exilis*, had only five fertile stamens (the longer row), the shorter row being almost invariably reduced to staminodes. In only five out of 109 flowers of *O. exilis* were there one or (once) two, much reduced anthers in the shorter row. In 100 flowers of the large taxon, *O. corniculata*, 95 had the usual full complement of 10 fertile stamens in two rows and none had less than eight. What one would like to know is whether this difference is constant. Several plants of *O. exilis* found at Haslemere, Surrey, and one found at Handcross, W. Sussex, about 20 and 14 miles respectively from Dorking, had only five fertile stamens.

A further difference is that the flowers of *O. corniculata* open and close about one

hour earlier than those of *O. exilis*. On three successive sunny days, in July 1971, flowers of *O. corniculata* opened at about 09.00 and began closing at about 14.45 hrs, compared with 10.00 and 15.45 hrs respectively for *O. exilis*.

In addition to the smaller size of the parts and lower, mat-forming growth of *O. exilis*, two other differences between the two species may be mentioned. The capsules of *O. corniculata* are commonly hoary, with a pubescence of short, downwardly appressed hairs, while those of *O. exilis* are not hoary, generally having a sparser clothing of longer, patent hairs. The flowers of *O. corniculata* are usually orange-yellow with a ring or spots of red at the mouth of the corolla, while those of *O. exilis* are smaller and yellow with no red marks.

These two species of *Oxalis*, as they occur at Dorking, can be distinguished by the following couplet:

- 1a. Tap-root not thick. Leaves always green. Inflorescences always 1-flowered. Fertile stamens 5, the others reduced to staminodes. Capsules 5–8 mm, about 3 times as long as wide, abruptly narrowed to the tip . . . . . *O. exilis*
- 1b. Tap-root always thick, c. 2–5 mm diameter. Leaves usually suffused purple. Inflorescences 1–8-flowered. Fertile stamens mostly 10. Capsules 12–20 mm, about 5 or more times as long as wide, tapering to the tip . . . . . *O. corniculata*

#### ACKNOWLEDGMENTS

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J. A. REID

#### FRANKENIA LAEVIS L. IN ANGLESEY

*Frankenia laevis* is a local species of the upper margins of sandy or gravelly salt-marshes. In the British Isles it is restricted as a native plant to the southern and eastern coasts of England, from the Solent to the Wash. It also occurs in the Channel Islands, and on the Continent it is found along the western coast of France, from the English Channel southwards to the Mediterranean region, where it is common (Tutin 1962).

*Frankenia laevis* was found on a salt-marsh in north-western Anglesey by E. G. Webster in July 1965, when there appeared to be only one plant, forming a clump about 18 inches across. Two years later several more plants had become established, but the interest of his discovery did not occur to Webster until 1968, when he showed the plant to officers of the Nature Conservancy at Bangor, and its identification was confirmed at Monks Wood Experimental Station (E. G. Webster pers. comm. 1971).

In September 1970 I searched the locality thoroughly and found c 14 plants in flower. By June 1974 there were at least 35 plants and some of them had formed clumps over 3 feet across. The plants are established on the drier areas of the salt-marsh, on a substratum of sandy silt. They have every appearance of being in a very thriving condition and, once established, even in a more or less closed community, appear to spread through and eventually crowd out most of the other species present. The associates of the *Frankenia* at this site are: *Agrostis stolonifera*, *Armeria maritima*, *Aster tripolium*,

*Beta maritima* (rare), *Cochlearia danica*, *Festuca rubra*, *Juncus maritimus* (rare), *Plantago maritima*, *Puccinellia maritima*, *Sagina maritima* and *Spergularia media*.

The appearance of the *Frankenia* in this Anglesey salt-marsh, about 230 miles from its nearest localities as an undoubtedly native plant, inevitably raises the suspicion that it has been deliberately or accidentally introduced by man. At the moment there is no direct evidence for this, nor can any other means of dispersal over such a wide disjunction be suggested. Whatever the explanation may be, it seems that its steady increase during the nine years since it was first noticed in 1965 indicates that it may become permanently established in Anglesey.

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R. H. ROBERTS

### TARAXACUM PALUSTRE (LYONS) SYMONS IN ANGLESEY

The name *Taraxacum palustre* (Lyons) Symons has been used at various times in an aggregate sense to embrace the 'Marsh Dandelions', species usually associated with wet, grassy habitats and which have the outer bracts of the inflorescence adpressed. It is, however, *Taraxacum palustre* in the restricted sense which is the subject of this note.

Richards (1972) included *T. palustre* in section *Palustria* which, in the British Isles, consists of only three species, all confined to fen or meadow habitats and all with very restricted distributions. In England *T. palustre* is now found only in four vice-counties: S. Hants., Berks., E. Norfolk and Cambs. In Ireland it is recorded only from Co. Clare, but, although it is rather more plentiful in its Irish stations than in England, the total population in the British Isles is estimated at less than five hundred plants (Richards 1972).

In early May 1973, while examining one of the fen habitats of *Dactylorhiza traunsteineri* at Rhos y Gad, near Pentraeth, Anglesey, a 'Marsh Dandelion' was gathered which had very narrow, lobeless leaves with a hooded tip. It seemed to agree with the description of *T. palustre* and a specimen was submitted to Dr A. J. Richards, who confirmed our tentative identification. Examination of further specimens, also confirmed by Richards, has shown that this species occurs in three other fen areas in Anglesey, all four localities overlying the Carboniferous Limestone. These are Cors Goch, a nature reserve belonging to the North Wales Naturalists' Trust; Cors Bodeilio, near Pentraeth; and a small fen near the village of Llanbedrgoch. At all of them *T. palustre* is usually found in the grass-sedge community of which *Schoenus nigricans*, *Molinia caerulea* and *Carex panicea* are prominent members. A specimen gathered in May 1962 by one of us (R.H.R.) in the dune-marsh south-west of Llyn Rhos Ddu, in Newborough Warren National Nature Reserve, also proved to be this species.

Although these records indicate an important extension of the range of this distinctive species in Britain, our impression is that it is very restricted in its habitat requirements and that it is as rare a plant in Anglesey as it is in its English localities.

Specimens sent to Richards have been deposited in OXF and others in NMW.

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R. H. ROBERTS & A. MCG. STIRLING



# DOES *SAMBUCUS EBULUS* REPRODUCE BY SEED IN BRITAIN?

*Sambucus ebulus* L. is a predominantly southern European species, but with a range that extends from northern Africa to southern Scandinavia. Both in Britain and elsewhere towards its northerly limits it is quite likely to have been a deliberate introduction. If this be so, its persistence would be expected to be the more precarious the less favourable the climate. It is pertinent, therefore, to note that this species has been recorded in Scotland from about one fifth the number of 10 km squares from which it has been found in England. Moreover, it seems to have disappeared from over 80% of its Scottish squares, whilst the extinctions in England probably do not exceed 30% (Perring & Walters 1962).

This very strikingly diminished occurrence throughout Britain, despite its vigorous vegetative spread, lends support to the view that the range was artificially extended by man, owing to the medicinal and other uses for which it was formerly cherished. It was, for instance, valued as a potent purgative and also as a source of dye. Its merits were appreciated in Saxon times and perhaps even earlier.

It is in the context of the probable artificial extension of its geographical range that the reproduction of *S. ebulus* may be significant. Local persistence when it is introduced into an area is normally assured by vegetative spread, since adventitious shoots develop from the horizontal roots. *S. ebulus* fruits freely, at least in southern England, but, although the number of fruits (each with 2-5 seeds) produced may be very considerable, I have searched in vain to find seedlings around colonies of the plant. Colonies of *S. ebulus* often extend over an appreciable area but are more or less continuous and there is a noteworthy sparsity of isolated outliers. This might be expected if vegetative extension were alone responsible, but not if seedlings developed from bird-droppings (Whitethroats, *Sylvia communis* Lath., have been observed to feed upon the berries).

A large number of ripe fruits were collected from Sussex in the favourable autumn of 1969 and over 100 seeds were sown the same day in a pot, the soil of which was kept moist. But after five years no sign of any seedlings has appeared. Possibly passage through a bird may be requisite to promote germination.

It would be of interest to know if seedlings have been observed by others around colonies of *Sambucus ebulus* or if any botanist has successfully germinated seeds from British (or other) plants.

## REFERENCE

PERRING, F. H. & WALTERS, S. M., eds (1962). *Atlas of the British Flora*, p. 263. London.

E. J. SALISBURY