



VACCINIUM

1. *Vaccinium oxycoccos* / *V. microcarpum*

The widespread cranberry in the British Isles is *V. oxycoccos* L. which is tetraploid ($2n = 48$). Plants with smaller, usually solitary, deeply coloured flowers, glabrous pedicels, elliptic fruits and short, triangular leaf blades which are widest near the base have been given specific rank as *V. microcarpum* (Turcz. ex Rupr.) Schmalh. and have been recorded from many sites in central and north-eastern Scotland.

Recently, similar plants have been found in two sites in Northumberland (Swan 1993) which tend to be drier than those typical for *V. oxycoccos*. Unpublished investigations by R. Marsden and A. J. Richards show that these are diploid, but they can only otherwise be reliably distinguished from *V. oxycoccos* by shorter stomatal length (less than $14.3 \mu\text{m}$). At these sites, and a few others in Northumberland, plants with relatively infertile pollen (less than 45% of tetrads regular) are considered to be triploids, but these cannot otherwise be distinguished with certainty from *V. oxycoccos*.

Apart from stomatal length and chromosome number, no single character was found to safely separate diploids from *V. oxycoccos* in Northumberland, although a combination of four characters could do so:

- i) anther length less than 2.8 mm;
- ii) filament glabrous or nearly so;
- iii) petal length less than 4.5 mm;
- iv) pedicel glabrous, or nearly so.

We expect plants with four of these character states together to be diploid, and this can be confirmed by the stomatal length.

In our experience, *V. 'microcarpum'* is not well differentiated morphologically from *V. oxycoccos*, a conclusion with which Ravanko (1990) agrees, and we do not consider it warrants a specific rank. However, it seems that no combinations of this taxon have yet been published at a lower rank. For the time being please record as *V. microcarpum* and collect vouchers of intermediate plants.

- References** Ravanko, O. (1990). *Ann. Bot. Fennici* **27**: 235-239.
Swan, G. A. (1993). *Flora of Northumberland*. The Natural History Society of Northumbria, Newcastle upon Tyne.
Jacquemart, A-L. (1997). *Journal of Ecology* **85**: 381-396.

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2. *Vaccinium uliginosum* subsp. *microphyllum*

It is possible that the northern *V. uliginosum* L. subsp. *microphyllum* Lange could be present in Shetland or mainland Scotland (McAllister & Stewart 1989). The subspecies can be distinguished as follows (*Flora Europaea* **3**: 13):

Subsp. *uliginosum*: Stems to 75(-100) cm, erect; leaves 10-25(-35) mm; pedicels as long as corolla; lobes of corolla revolute; $2n=48$.

Subsp. *microphyllum*: Stems to 15 cm, procumbent to decumbent; leaves 6-15 mm; pedicels 1-3, much shorter than corolla; lobes of corolla scarcely revolute; $2n=24$.

Plant Crib

Small-leaved, prostrate, strongly rhizomatous plants should be collected from hillside and ridges for H. McAllister (wrap young rhizomes in damp moss).

Reference McAllister, H. A. & Stewart, W. S. (1989). *Watsonia* **17**: 359.

3. *Vaccinium* 'intermedium' (*V. myrtillus* ' *V. vitis-idaea*)

	<i>V. myrtillus</i> L.	<i>V. × intermedium</i> Ruthe	<i>V. vitis-idaea</i> L.
Stem	Green, strongly ridged, ± flexuous, glabrous	Green, slightly ridged or angled; sparsely hairy	Brown below, green above, not ridged, ± straight; hairy
Leaves	Deciduous, leaf fall annual; thin, green translucent, ovate to elliptic; apex acute; base slightly cordate; margins flat, toothed	Semi-deciduous, leaf fall 2-3 years, intermediate in most characters	Evergreen, leaf fall 4-5 years; tough, thick, dark green, obovate to elliptic; apex emarginate; base rounded to cuneate; margins in-rolled, ± entire to weakly toothed
Bracts	2	1	1
Bracteoles	Absent	2	2
Flowers	1(-2) in leaf axils; globose, dark pink; filaments glabrous	(1-)2-3(-4) in leaf axils; urceolate, pale pink; filaments puberulent	6-10(-12) in terminal racemes; campanulate, whitish-pink; filaments pubescent
Fruit	Bluish-purplish-black with glaucous bloom, regularly produced	Reddish black or purple, rarely produced	Red, sporadically produced

This hybrid has been found mainly in the Midlands / Pennines and N Scotland, but it would be worthwhile looking for it in moorland areas elsewhere. It is obviously intermediate between the parents in many features and shows some hybrid vigour, some patches spreading at the expense of the parent species (Ritchie 1955a, b). Its habitats seem almost always to have been recently disturbed by man - banks of cut peat, edges of ditches, cart-tracks, moorland paths, old gun-sites, etc.

A good time to look for it is late in the season when leaves of *V. myrtillus* have dropped, or in spring when the new flush of leaves is occurring in both species - it differs from both in timing.

References Ritchie, J. C. (1955a). *New Phytologist* **54**: 49-67.
Ritchie, J. C. (1955b). *New Phytologist* **54**: 320-335.