

# Rumex rupestris



## Status

Annexes II(b) and IV(b), EC Habitats Directive.  
Schedule 8, Wildlife & Countryside Act (1981).  
IUCN Threat category: Endangered (2005).  
Nationally Scarce.  
UK Biodiversity Action Plan Priority species.

## Taxonomy

Magnoliopsida: Polygonaceae

Scientific name:

*Rumex rupestris* Le Gall

Common names:

Shore Dock, Tafolen y Traeth

*Rumex rupestris* is a member of the Dock family and looks like a typical dock species (Figure 1); most people will instantly recognise it as a member of the genus. There are about 23 *Rumex* species in Britain (Stace 1997), many of which hybridise and ripe fruit are required for identification. The best identification guide for *Rumex* in Britain is the BSBI Handbook *Docks and Knotweeds of the British Isles* (Lousley & Kent 1981).

*Rumex rupestris* is a reasonably distinct species which is easily recognised once known, and it varies little throughout its range. Hybrids of *R. rupestris* with *R. conglomeratus*, *R. crispus*, *R. pulcher* and *R. obtusifolius* have been recorded only in Britain (Holyoak 2000); given the ease with which it hybridises plants should be carefully examined where mixed species populations occur. The hybrids typically have low fertility, and up to only 20% of the seeds develop (often much less).

## Distribution & Ecology

*Rumex rupestris* is reputed to be the rarest dock in NW Europe. It is a coastal species found in SW England, South Wales and Anglesey. It also grows in the Channel Islands, France, Ireland and NW Spain and is rare and declining throughout its range. During the last century, the number of mainland UK sites has declined by over 80% and it currently occurs in only ten hectads. The decline is probably mainly due to loss of habitat for recreational and sea defence purposes and competition from other plants, but some natural turnover also occurs. It is currently included in a species recovery programme undertaken by Plantlife, CEH and English Nature.



Figure 1. *Rumex rupestris* (from H. Trimen (1876), *Journal of Botany, new series* 5: tab. 173)

It occurs on sand dunes, shingle, open coastal rocks and cliffs, usually where there is some freshwater flushing. Populations are usually small and isolated, and appear to be somewhat dynamic or 'inherently ephemeral' (Daniels *et al.* 1998).

## Identification & Field survey

*Rumex rupestris* can be identified by the combination of:

- fruits usually with all three tubercles swollen and which are as wide as or nearly as wide as the tepals,
- tepals usually 3-4 mm long, entire without any teeth, and
- leaves elliptic-oblong to lanceolate, often undulate on margins, wedge-shaped or rounded at base

## Differentiation from similar species

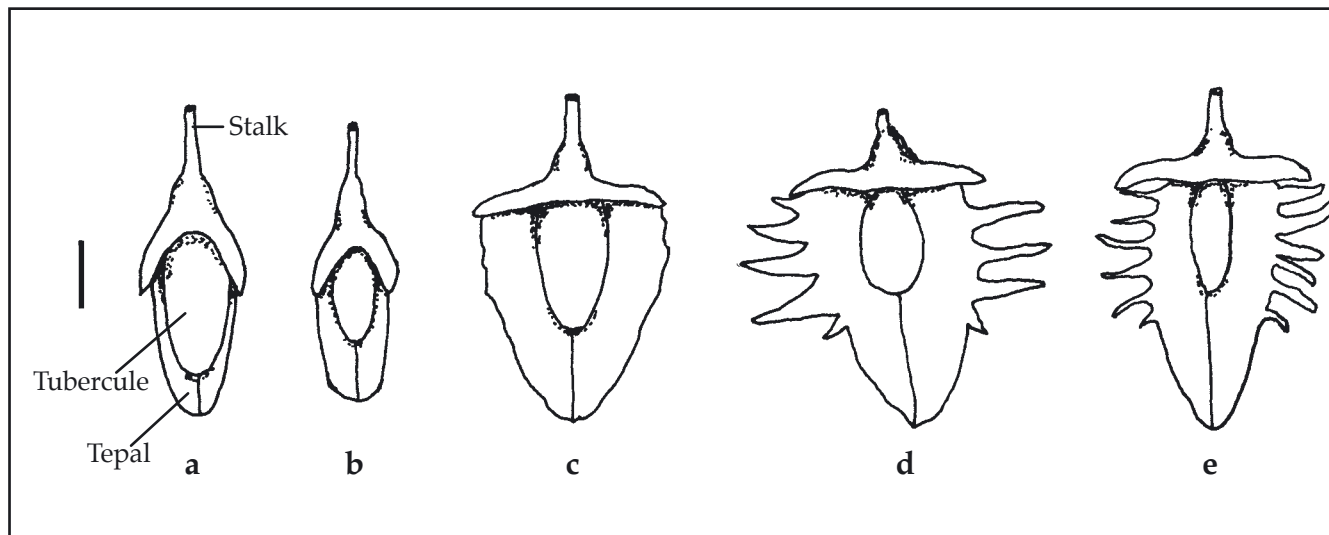


Figure 2. *Rumex* fruits. **a** *R. rupestris*; **b** *R. conglomeratus*; **c** *R. crispus*; **d** *R. obtusifolius*; **e** *R. pulcher*. Scale bar 1 mm.

*Rumex conglomeratus* differs in having shorter tepals mostly less than 3 mm long (Figure 2b). *Rumex crispus* differs in having tepals much wider than the tubercules (Figure 2c). *Rumex obtusifolius* and *R. pulcher* differ in having toothed tepals (Figures 2d,e).

Due to confusion with vegetative plants of *R. crispus* which commonly grow in similar habitats, and hybrids with various species, counts should only be made of fruiting material with good fruit set. Some cliff sites are visible only from the sea, and surveys by boats may be required.

### Key characters

Perennial to c. 70 cm tall. Leaves slightly fleshy, elliptic-oblong to lanceolate in shape, weakly undulate, margins with broad rounded lobes, wedge-shaped or rounded at base. Inflorescence spreading c. 25-50 degrees from stem, crowded. Fruits usually with all three tubercules swollen c. 2.5 mm long, as wide as or nearly as wide as the tepals, tepals usually 3-4 mm long, entire without any teeth. Seeds c. 2 mm long, trigonous.

### Local action plans

UK BAP Species Action Plan:  
<http://www.ukbap.org.uk>

### References

- Daniels, R. E., McDonnell, E. J., & Raybould, A. F. (1998). The current status of *Rumex rupestris* Le Gall (Polygonaceae) in England and Wales, and threats to its survival and genetic diversity. *Watsonia* **22**: 33-39.
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- Kay, Q. O. N. & John, R. F. (1995). *The conservation of scarce and declining plant species in lowland Wales: Population genetics, demographic ecology and recommendations for future conservation of 32 species of lowland grassland and related habitats*. Countryside Council for Wales Science Report No. 110. March 1995.
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- Stace, C. A. (1997). *New Flora of the British Isles*. 2<sup>nd</sup> ed. Cambridge University Press, Cambridge.
- Trimen, H. (1876). *Rumex rupestris*, Le Gall, as a British Plant. *Journal of Botany new series* **5**: 1-4.

A full species dossier and briefing sheet are available on the Plantlife website ([www.Plantlife.org.uk](http://www.Plantlife.org.uk)) Additional photographs are available on the ARKive website (<http://www.arkive.org/species>).