

# OV41

## *Parietaria diffusa* community

### *Parietarietum judaicae* (Arènes 1928) Oberdorfer 1977

#### Constant species

*Parietaria diffusa*.

#### Rare species

*Brassica oleracea*, *Draba aizoides*, *Silene nutans*.

#### Physiognomy

The *Parietarietum judaicae* comprises vegetation of crevices and small ledges in which *Parietaria diffusa* is the only consistent feature throughout, with occasional trails of *Hedera helix* and *Galium aparine*. *Asplenium ruta-muraria* is a scarce associate.

#### Sub-communities

##### *Homalothecium sericeum-Tortula muralis* sub-community.

*Parietaria* tends to be more abundant in this vegetation and the only frequent associates are *H. sericeum*, *T. muralis*, *Schistidium apocarpum* and *Barbula* spp. Occasionally, there are records for small asplenioid ferns, including *A. trichomanes*, *A. adiantum-nigrum*, *Poa trivialis* and ephemerals such as *Bromus hordeaceus hordeaceus*, *B. sterilis* and *Arabidopsis thaliana*.

***Daucus carota* sub-community.** *Parietaria* is generally of lower cover here and is often accompanied by clumps of *Dactylis glomerata* and *Festuca rubra*, tall herbs such as *Daucus carota*, *Centaurea scabiosa* and *Euphorbia portlandica* with occasional *Plantago lanceolata*, *P. coronopus*, *Sanguisorba minor*, *Beta vulgaris* ssp. *maritima* and *Sedum acre*. This vegetation also provides a locus for the nationally rare *Brassica oleracea* and, more locally, *Draba aizoides* and *Silene nutans*.

#### Habitat

The *Parietarietum* is characteristic of sunnier crevices and ledges in walls and on rock faces in quarries and natural cliffs in the warmer and drier southern lowlands of Britain. *Parietaria* is a somewhat calcicolous plant with a more or less Continental distribution in Britain,

being commonest in the south-east of England and extending north and west around the coast (Perring & Walters 1962). It prefers sunny situations on limestone or mortared walls, and is more frequent on south- and west-facing aspects, though it often seems to benefit from the kind of protection against desiccation that can be found on walls built against earth banks (Segal 1969). In such places, too, nutrients from rain trickling through the soil behind the walls sustain more luxuriant growth because *Parietaria* is rather nitrophilous. The *Homalothecium-Tortula* sub-community occurs in suitable situations throughout the range but the *Daucus* sub-community is typical of seaside walls and cliffs, particularly on more base-rich substrates along the south coast of England and in Wales.

#### Zonation and succession

Where walls have smaller crevices in mortar, the *Parietarietum* can be found with the *Cymbalariaetum* and *Asplenietum* communities, where dominance shifts to *Cymbalaria* or small ferns. In fact, Segal (1969) saw *A. ruta-muraria* and *Cymbalaria* as precursors to *Parietaria* on newly-built or restored walls, being overwhelmed as the latter increased its cover. Where there is local enrichment around walls and cliffs, the *Parietarietum* occurs with the *Urtica-Galium* community.

On coastal shore-banks and cliff-tops, the *Daucus* sub-community can give way to the *Festuca-Daucus* grassland with an increase in grass cover and higher frequency of herbs like *Sanguisorba minor* and *Plantago lanceolata*.

#### Distribution

The community occurs widely on suitable habitats in the south of England but with the *Daucus* type limited to the coast.

#### Affinities

The *Parietarietum* has been extensively recorded from other parts of Europe like The Netherlands (Westhoff &

den Held 1969) and Germany (Pott 1982). Some of these authors recognise a general *Parietarium judaicae* (Arènes 1928) Oberdorfer 1977 but, in his overview of wall vegetation, Segal (1969) distinguished various climatic provinces. In the more Atlantic west of Europe, the *Asplenio-Parietarium* was the typical syntaxon, with *Asplenium ruta-muraria*, *Tortula muralis* and *Homalothecium sericeum*. His *asplenietosum* and *poeto-*

*sum compressae* are both like the first sub-community characterised here. In Ireland, White and Doyle (1982) have recognised the *Asplenio-Parietarium*, as well as three other related assemblages which Segal (1969) characterised. *Parietaria* vegetation of the kind included in this scheme is placed in a Parietation or Centrantho-Parietation alliance with the Asplenietea.

### Floristic table OV41

	a	b	41
<i>Parietaria diffusa</i>	V (3–9)	V (1–8)	V (1–9)
<i>Homalothecium sericeum</i>	III (3–4)		II (3–4)
<i>Tortula muralis</i>	III (1–3)		II (1–3)
<i>Poa trivialis</i>	II (1–3)		I (1–3)
<i>Schistidium apocarpum</i>	II (2)		I (2)
<i>Barbula</i> sp.	II (2)		I (2)
<i>Solanum dulcamara</i>	I (3)		I (3)
<i>Asplenium adiantum-nigrum</i>	I (1)		I (1)
<i>Asplenium trichomanes</i>	I (2)		I (2)
<i>Bromus hordeaceus hordeaceus</i>	I (3)		I (3)
<i>Bromus sterilis</i>	I (3)		I (3)
<i>Arabidopsis thaliana</i>	I (2)		I (2)
<i>Arrhenatherum elatius</i>	I (3)		I (3)
<i>Cerastium fontanum</i>	I (2)		I (2)
<i>Tanacetum vulgare</i>	I (4)		I (4)
<i>Cirsium arvense</i>	I (4)		I (4)
<i>Arenaria serpyllifolia</i>	I (3)		I (3)
<i>Dactylis glomerata</i>	I (1)	V (1–4)	III (1–4)
<i>Daucus carota</i>		V (1–4)	III (1–4)
<i>Festuca rubra</i>		V (1–6)	III (1–6)
<i>Centaurea scabiosa</i>		IV (2–3)	III (2–3)
<i>Brassica oleracea</i>		III (2–7)	II (2–7)
<i>Plantago lanceolata</i>	I (2)	III (1–3)	II (1–3)
<i>Euphorbia portlandica</i>		III (1–4)	II (1–4)
<i>Sanguisorba minor</i>		III (1–3)	II (1–3)
<i>Plantago coronopus</i>	I (3)	II (1–2)	II (1–3)
<i>Rumex acetosa</i>		II (3)	I (3)
<i>Beta vulgaris maritima</i>		II (4–5)	I (4–5)
<i>Draba aizoides</i>		II (3)	I (3)
<i>Sedum acre</i>		II (1–3)	I (1–3)
<i>Silene nutans</i>		II (1–2)	I (1–2)
<i>Armeria maritima</i>		II (1)	I (1)
<i>Carlina vulgaris</i>		II (1)	I (1)
<i>Leucanthemum vulgare</i>		II (2–3)	I (2–3)
<i>Cochlearia officinalis</i>		II (1–3)	I (1–3)
<i>Scabiosa columbaria</i>		II (1–2)	I (1–2)

<i>Avenula pubescens</i>		I (1)	I (1)
<i>Rubia peregrina</i>		I (1)	I (1)
<i>Thymus praecox</i>		I (1)	I (1)
<i>Hedera helix</i>	II (1–3)	II (1–2)	II (1–3)
<i>Galium aparine</i>	II (1–2)	II (4)	II (1–4)
<i>Asplenium ruta-muraria</i>	I (2)	I (1–2)	I (1–2)
<i>Urtica dioica</i>	I (2–4)	I (2)	I (2–4)
<i>Medicago lupulina</i>	I (3)	I (1)	I (1–3)
<i>Sonchus asper</i>	I (1)	I (2)	I (1–2)
<i>Senecio vulgaris</i>	I (1)	I (1–3)	I (1–3)
Number of samples	7	7	14
Number of species/sample	8 (3–11)	17 (11–26)	13 (3–26)

a *Homalothecium sericeum*-*Tortula muralis* sub-community

b *Daucus carota* sub-community

41 *Parietarietum judaicae* (total)