OV14
Urtica urens-Lamium amplexicaule community

Synonymy
Spergula arvensis-Lamium amplexicaule community Sissingh 1950

Constant species
Capsella bursa-pastoris, *Chenopodium album*, *Poa annua*, *Senecio vulgaris*, *Stellaria media*, *Urtica urens.*

Rare species
Erodium moschatum, *Medicago polymorpha*, *Sisymbrium irio.*

Physiognomy
In the annual vegetation of the *Urtica urens-Lamium amplexicaule* community, the usual dominants are *Stellaria media*, *Poa annua* or *Capsella bursa-pastoris*, with *Chenopodium album* making a very frequent but somewhat more variable contribution to the cover, *Senecio vulgaris* and *Urtica urens* constant but generally of less abundance.

Also frequent, sometimes with locally high cover, are *Lamium amplexicaule*, *Solanum nigrum* and the now widely naturalised *Galinsoga parviflora*, a South American plant which escaped from Kew around 1860 (Salisbury 1964). *Spergula arvensis*, *Veronica persica*, *Matricaria perforata*, *Chamomilla suaveolens*, *Polygonum aviculare* and *Elymus repens* are common, too, though usually at low cover and another South American introduction, *Solanum sarrachoides*, is occasional. *Polygonum persicaria*, *Sonchus oleraceus*, *S. asper* and *Bilderdykia convolvulus* are scarce companions.

More locally, this vegetation can show a very distinctive enrichment from a variety of 'shoddy aliens'. These are plants whose seed was brought in with rags from different parts of Europe, the waste from which, after recovery of wool fibre, was dumped or spread on fields as a fertiliser. In recent years (e.g. Lavin & Wilmore 1994), *Stellaria-Urtica* vegetation in such fields in West Yorkshire has provided a locus for plants like *Sisymbrium irio*, *S. loeselii*, *S. orientale*, *Ammi majus*, *Echinochloa crus-galli*, *Medicago arabica*, *M. polymorpha*, *M. minima*, *Xanthium spinosum*, *Erodium chium*, *E. botrys*, *E. moschatum* and, more rarely *Amaranthus hybridus*, *A. albus*, *A. deflexus*, *Scorpiurus muricatus*, *Carduus pycnocephalus*, *Trifolium tomentosum* and *Carthamus lanatus*.

Habitat
The *Urtica urens-Lamium amplexicaule* community is characteristically found among root and vegetable crops on light and more base-poor soils in the warmer south and east of England.

Lamium amplexicaule is a native plant of lighter soils in southern and eastern England and all up the eastern lowlands of Scotland, overlapping in its edaphic preferences with *Spergula arvensis* but extending further on to less acidic loams. Here it occurs also with *Urtica urens*, an annual of lighter soils that is normally poorly represented in vegetation like the *Spergulo-Chrysanthemetum* because of the lower nutrient content of the substrates there.

Along with other widely occurring nitrophilous weeds, *Urtica*, *Lamium* and *Spergula* are found here in association with *Solanum nigrum*, its introduced relative *S. sarrachoides* and the garden escape *Galinsoga parviflora*, which add a more Continental character to the assemblage: these are plants more strikingly confined to the warmer and drier south-east of the country.

Such plants have found a congenial habitat in the fertilised but not so strongly herbicide-treated arable crops of market gardens and smallholdings: Silverside (1977) recorded this community in a wide variety of root, vegetable and salad crops, often grown in a strip-farming system that allowed plenty of room for the assemblage to develop.

This kind of situation also seems to provide conditions suitable for a variety of aliens that are brought into Britain on imported wool, notably the shoddy used by mills concentrated around Dewsbury, Ossett and Morley (Rodwell 1994*a*). The waste from shoddy used to

be widely distributed as a slow-acting organic manure, and was especially significant in enriching the weed flora of the market-gardening area of the Thames Valley and Bedfordshire (Dony 1953*a*, *b*). Similar entertaining diversity is still seen in stands of this community in West Yorkshire (Lavin & Wilmore 1994).

Zonation and succession

Where fertilising is more intensive among arable crops, the *Urtica-Lamium* community is replaced by other assemblages like the *Stellaria-Capsella* vegetation. Cultivation year after year helps regenerate the community provided there is no great shift in treatment of the crops and continuing additions of shoddy waste can maintain distinctive diversity.

Distribution

The community is widespread in southern and eastern England with local stands further north on the eastern side of the country.

Affinities

A *Spergula arvensis-Lamium amplexicaule* community was referred to briefly by Sissingh (1950) as a replacement in The Netherlands for the *Echinochloo-Setarietum* on sandy alluvium after the harvesting of late-season root crops. This latter community was seen by Silverside (1977) as represented here by what we have termed the *Digitaria-Erodium* assemblage, a much more localised syntaxon of drought-prone sands in the warmer south-east.

Floristic table OV14

Stellaria media	V (1–9)
Urtica urens	V (1–8)
Capsella bursa-pastoris	V (1–8)
Poa annua	V (1–4)
Senecio vulgaris	V (1–8)
Chenopodium album	IV (1–4)
Lamium amplexicaule	III (1–4)
Solanum nigrum	III (1–6)
Galinsoga parviflora	III (1–7)
Spergula arvensis	III (1–4)
Veronica persica	III (1–3)
Matricaria perforata	III (1–3)
Polygonum aviculare	III (1–3)
Elymus repens	III (1–3)
Chamomilla suaveolens	III (1–6)
Solanum sarrachoides	II (1–5)
Erodium cicutarium	I (1)
Polygonum persicaria	I (1–4)
Sonchus oleraceus	I (1–3)
Lamium purpureum	I (6)
Fumaria officinalis	I (1)
Euphorbia peplus	I (1)
Sonchus asper	I (1–2)
Bilderdykia convolvulus	I (1–2)
Papaver rhoeas	I (1)
Agrostis stolonifera	I (1)
Rumex obtusifolius	I (1–3)
Convolvulus arvensis	I (1–3)
Cirsium arvense	I (1)
Plantago lanceolata	I (1)
Artemisia vulgaris	I (1)
Number of samples	18
Number of species/sample	12 (9–18)
Vegetation cover (%)	66 (30–100)

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