OV17

Reseda lutea-Polygonum aviculare community
Descurainio-Anchusetum arvensis Silverside 1977

Constant species

Anchusa arvensis, *Bilderdykia convolvulus*, *Chenopodium album*, *Descurainia sophia*, *Elymus repens*, *Polygonum aviculare*, *Reseda lutea.*

Physiognomy

The *Descurainio-Anchusetum* is an ephemeral community in which *Descurainia sophia*, probably a long-established introduction (Rich 1991), *Anchusa arvensis* and *Reseda lutea* comprise a distinctive group of constants, along with very frequent *Elymus repens*, *Chenopodium album*, *Polygonum aviculare* and *Bilderdykia convolvulus*.

Also very common are *Veronica persica*, *V. polita*, *Chamomilla suaveolens*, *Matricaria perforata*, *Stellaria media*, *Senecio vulgaris*, *Solanum nigrum*, *Silene alba* and *Colvolvulus arvensis*. More distinctive occasionals include *Erodium cicutarium*, *Conyza canadensis*, *Urtica urens*, *Papaver rhoeas* and *Linaria vulgaris* with the grasses *Poa annua*, *Agrostis capillaris*, *A. stolonifera* and *Dactylis glomerata*.

Habitat

The *Descurainio-Anchusetum* is characteristic of disturbed, dry, sandy soils among arable crops in the Continental climate of East Anglia.

D. sophia is perhaps not native to Britain (Rich 1991, Stace 1995) but it is long established and was formerly, according to Salisbury (1964), much more common than now as a plant of waste ground. It remains frequent among arable crops in East Anglia from where Silverside (1977) characterised this assemblage on soils derived from superficials over chalk, reasonably calcareous, often sandy, though not always rapidly draining. Even in the very dry climate of Breckland, where the community was especially distinctive, the soils could be moist, particularly where irrigation was frequent. *Anchusa arvensis*, *Reseda lutea* and *Veronica polita* are three other species here which reflect the combination of light soils in a more Continental climate typical of the community.

This kind of weed vegetation was encountered by Silverside (1977) among a variety of root crops, in barley and in fallow fields. He recognised some tentative subassociations on soils of varying texture and dryness but in this scheme those samples are included in other different communities.

Zonation and succession

Where soils are somewhat more clayey and calcareous in arable fields, the *Descurainio-Anchusetum* can give way to the *Kickxietum* with the appearance of *Euphorbia exigua*, *Kickxia elatine* and *Chaenorhinum minus*. More intensively fertilised fields usually see a transition to the *Matricaria-Stellaria* community where *Lycopsis arvensis* can persist with some frequency.

Distribution

The community was found by Silverside (1977) only in East Anglia.

Affinities

The *Descurainio-Anchusetum* was first described as an association by Silverside (1977) and has no apparent equivalent anywhere else in Europe. He considered it as an analogue of the *Lycopsietum arvensis* (Raabe 1944) Passarge 1964, an association which is here subsumed within the *Matricaria-Stellaria* community.

Floristic table OV17

Reseda lutea	V (1–8)	*Artemisia vulgaris*	II (1–3)
Polygonum aviculare	V (1–6)	*Dactylis glomerata*	II (1–3)
Elymus repens	V (1–6)	*Medicago lupulina*	II (1–3)
Chenopodium album	V (1–6)	*Anagallis arvensis*	II (1–3)
Bilderdykia convolvulus	IV (1–6)	*Geranium dissectum*	II (1–3)
Descurainia sophia	IV (1–4)	*Linaria vulgaris*	II (1–3)
Anchusa arvensis	IV (1–6)	*Sisymbrium orientale*	I (1–4)
Veronica persica	III (1–6)	*Diplotaxis muralis*	I (1–3)
Senecio vulgaris	III (1–3)	*Bromus sterilis*	I (1–3)
Stellaria media	III (1–3)	*Malva neglecta*	I (1–3)
Silene alba	III (1–3)	*Echium vulgare*	I (1)
Matricaria perforata	III (1–8)	*Papaver dubium*	I (4)
Veronica polita	III (1–3)	*Polygonum persicaria*	I (1–3)
Convolvulus arvensis	III (1–3)	*Polygonum nodosum*	I (1–3)
Solanum nigrum	III (1–3)	*Lamium amplexicaule*	I (1)
Chamomilla suaveolens	III (1–6)	*Sisymbrium officinale*	I (1–3)
Poa annua	II (1–4)	*Sinapis arvensis*	I (1–3)
Erodium cicutarium	II (1–4)	*Medicago sativa*	I (1)
Conyza canadensis	II (1–3)	*Silene vulgaris*	I (1–3)
Agrostis capillaris	II (1–3)	*Rumex crispus*	I (1)
Spergula arvensis	II (1–6)	*Urtica dioica*	I (1–3)
Urtica urens	II (1–6)		
Papaver rhoeas	II (1–3)		
Capsella bursa-pastoris	II (1–3)		
Agrostis stolonifera	II (1–4)		

Number of samples	17
Number of species/sample	17 (7–30)
Vegetation cover (%)	62 (15–90)

https://doi.org/10.1017/CBO9780511541834.086 Published online by Cambridge University Press