SM25
Suaeda vera drift-line community
Elymo pycnanthi-Suaedetum verae (Arènes 1933) Géhu 1975

Synonymy
Suaedetum fruticosae Tansley 1939 *p.p.*; *Agropyro-Suaedetum fruticosae* Adam 1976; *Halimiono-Suaedetum fruticosae* Adam 1976.

Constant species
Halimione portulacoides, *Suaeda vera*.

Rare species
Arthrocnemum perenne, *Suaeda vera*.

Physiognomy
The *Elymo pycnanthi-Suaedetum verae* is of variable appearance. The two association constants are sometimes co-dominant as a more or less closed shrubby cover; in other cases they occur as scattered bushes in a grassy ground. The *S. vera* shoots provide a niche for a varied flora of epiphytic lichens (Ellis 1960).

Sub-communities

***Elymus pycnanthus* sub-community:** *Elymo pycnanthi-Suaedetum verae typicum* Géhu & Delzenne 1975; *Agropyro-Suaedetum fruticosae* Adam 1976. Here the cover of *H. portulacoides* is low and the vegetation is dominated by complementary proportions of *S. vera* bushes and stiff clumps of *Elymus pycnanthus* with usually a little *Festuca rubra*. The upper edge of stands may be marked in spring by a narrow band of winter annuals such as *Cochlearia danica*, *Myosotis ramosissima*, *Sagina maritima* and *Valerianella locusta* germinating on drift debris.

***Halimione portulacoides* sub-community:** *Elymo pycnanthi-Suaedetum verae halimionetosum* Géhu & Delzenne 1975; *Halimiono-Suaedetum fruticosae* Adam 1976. *S. vera* and *H. portulacoides* are co-dominant as a shrubby canopy of variable height over a ground of scattered *Puccinellia maritima* and *Limonium* cf. *vulgare*, often with a little *Aster tripolium*, annual *Salicornia* spp., *Spergularia media* and *Suaeda maritima*. The sub-community provides an occasional high-level context for *Bostrychia scorpioides* and *Pelvetia canaliculata*.

Habitat
The association is most characteristic of drift-lines at salt-marsh/shingle interfaces with a tendency for the *Halimione* sub-community to be associated with superficial smears of sticky yellow-brown clay. The *Elymus* sub-community often runs down-marsh on ridges of drier silt and shorter-growing stands of the *Halimione* sub-community can tolerate up to about 120 submergences/year.

Zonation and succession
The association marks a particular type of transition from the upper marsh to other maritime communities and the driftline stands are probably stable in time.

The low-level stands of the *Halimione* sub-community overlap the habitat of the *Frankenia laevis* sub-community of the *Suaeda vera-Limonium binervosum* salt-marsh and at some sites in north Norfolk there is a mosaic of the two communities. The balance between them could be controlled by rabbit-grazing. Chapman (1960*b*) suggested that *Limonium bellidifolium* declined on Hut Marsh, Scolt Head Island, Norfolk because of the increased vigour of *H. portulacoides* following the reduction there of rabbit-grazing.

Distribution
The association occurs in north Norfolk and Essex.

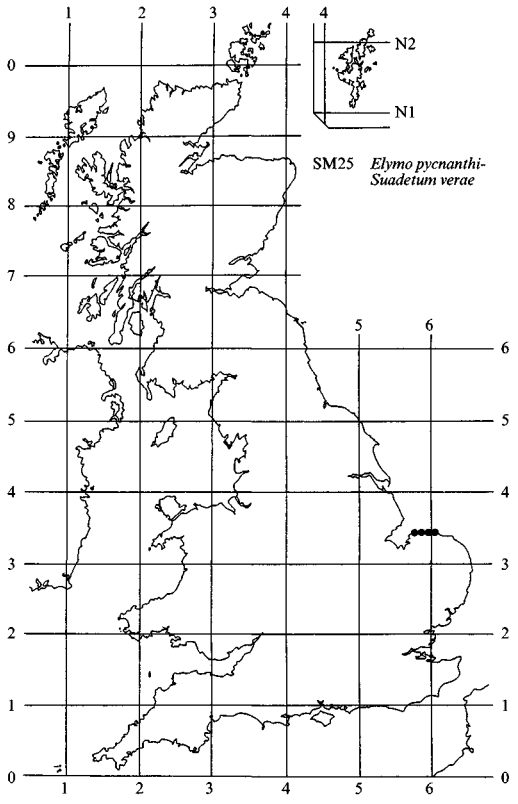
Affinities
Vegetation similar to the British stands of the *Elymo-Suaedetum* has been described from western France (Corillion 1953, Vanden Berghen 1965*a*, Géhu & Géhu 1969, Géhu 1972, 1975). Géhu (1975) and Géhu & Delzenne (1975) have emphasised the Mediterranean affinities of *Suaeda vera* by assigning the association to the Halimionion in the Arthrocnemetea fruticosae. An alternative view would be to stress the drift-line character of the vegetation and place the association with the *Atriplici-Elymetum pycnanthi* in the Elymion pycnanthi.

Floristic table SM25

	a	b	25
Suaeda vera	V (1–8)	V (3–8)	V (1–8)
Halimione portulacoides	V (2–4)	V (6–9)	V (2–9)
Elymus pycnanthus	V (4–10)		IV (4–10)
Festuca rubra	III (2–5)		II (2–5)
Artemisia maritima	II (1–2)		I (1–2)
Cochlearia anglica	II (1–3)	I (1)	I (1–3)
Cochlearia danica	II (1–3)		I (1–3)
Glaux maritima	II (2–3)		I (2–3)
Plantago maritima	II (1–5)		I (1–5)
Atriplex littoralis	I (2)		I (2)
Puccinellia maritima	I (2)	V (1–7)	III (1–7)
Limonium cf. *L. vulgare*	I (1–4)	V (2–3)	II (1–4)
Suaeda maritima	I (2–3)	III (2–3)	II (2–3)
Aster tripolium	I (2)	III (1–2)	I (1–2)
Bostrychia scorpioides		III (2–5)	I (2–5)
Salicornia agg.		III (3)	I (3)
Spergularia media		III (3–4)	I (3–4)
Arthrocnemum perenne		II (1–2)	I (1–2)
Cochlearia officinalis		II (2–3)	I (2–3)
Pelvetia canaliculata		II (4)	I (4)
Triglochin maritima		II (2–3)	I (2–3)
Algal mat		I (5)	I (5)
Number of samples	13	7	20
Mean number of species/sample	6 (4–8)	8 (5–11)	7 (4–11)
Mean vegetation height (cm)	70 (50–100)	43 (20–73)	61 (20–100)
Mean total cover (%)	95 (70–100)	84 (50–100)	91 (50–100)

a *Elymus pycnanthus* sub-community
b *Halimione portulacoides* sub-community
25 *Elymo pycnanthi-Suaedetum verae* salt-marsh (total)

https://doi.org/10.1017/CBO9780511541834.029 Published online by Cambridge University Press



https://doi.org/10.1017/CBO9780511541834.029 Published online by Cambridge University Press