SM12

Rayed Aster tripolium on salt-marshes

Stands dominated by rayed Aster tripolium have been encountered in situations with some freshwater influence such as brackish ditches behind sea walls where Spartina anglica and Puccinellia maritima are frequent associates. Beeftink (1962, 1965) has described similar vegetation from sites with local freshwater flushing as a distinct Aster tripolium sociatie. Rayed A. tripolium is also abundant on periodically-flooded saline muds in inland salt-marshes with Spergularia marina and Puccinellia distans (see the Puccinellietum distantis asteretosum of Lee 1977; also Edees 1972).

Although some floras note a certain habitat distinction between rayed forms of *A. tripolium* and the var. discoideus (e.g. Petch & Swann 1968, Jermyn 1974,

Gibbons 1975), the situation is far from simple. The var. discoideus can also occur in brackish habitats and Jermy & Crabbe (1978) have recorded vegetation rich in dwarf rayed A. tripolium and Suaeda maritima from Salen Marsh, Mull, where there is little freshwater influence (cf. the intertidal Suaedeto maritimae-Asteretum tripolii Hocquette & Géhu 1965 in Ghestem 1972). Furthermore, even within the rayed form there appears to be a complex of genetically determined variation adapted to different environmental conditions (Gray 1971, 1974; Gray et al. 1979). Further sampling is needed to establish the ecological implications of this variation and to check the validity of erecting separate communities for the different forms.