

Cymodoceaceae

The family Cymodoceaceae includes only marine species and is closely related to two other seagrass families, the Ruppiaceae and the Posidoniaceae. There are five genera in this family: *Amphibolis*, *Cymodocea*, *Thalassodendron*, *Syringodium* and *Halodule*. *Amphibolis* is the only predominantly temperate genus, although the species *A. antarctica* extends into warmer waters along the Western Australian coast. Within the genus *Thalassodendron*, *T. pachyrhizum* is restricted to mostly temperate waters. The remaining genera have a primarily tropical distribution but extend into cooler waters, such as *T. ciliatum* in south-eastern Africa and *C. serrulata* in Western Australia.

Genera of the Cymodoceaceae contain a considerable diversity of plant forms, with wiry, vertical stems in *Thalassodendron*, tiny, fine leaves in *Halodule* and air-filled, tube-like shoots in *Syringodium*. The species diversity within genera mostly correlates with major oceanic disjunctions of the Indo-West Pacific and the Caribbean/Tropical Atlantic. The diversity of plant form is matched by diverse habitat occupation. For example, the wiry *Thalassodendron* occupies bare reef and rock, often with strong wave action, whereas the fine-leaved *Halodule* can be found in muddy or sandy intertidal areas.

Some of the earliest unambiguous seagrass fossils are members of this family. In particular, the fossils of the Middle Eocene (35–45 million years ago) Avon Park Formation in Florida USA, contain representatives of *Cymodocea* and *Thalassodendron*. Very little morphological differentiation is observed between these ancient fossils and their modern day counterparts.

Opposite top: *Thalassodendron pachyrhizum*.
Opposite bottom: *Amphibolis antarctica*.