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INVASIVE PLANT ADVISORY

Halophila stipulacea

Halophila stipulacea is a small tropical seagrass, native to the Red Sea, Persian Gulf, and the Indian Ocean. It thrives in shallow, tropical, and subtropical marine waters. It was first reported in Florida in 2024 in Biscayne Bay.¹

Environmental Damage

- This species is considered invasive due to its ability to rapidly spread across open areas and form dense mats that displace and interfere with beneficial native species.
- It can also form floating mats of fragmented material that drift and establish in new locations.
- *Halophila stipulacea* is included in the “100 Worst Invasive Alien Species in the Mediterranean” list due to its harmful effects on biodiversity.² It is also listed among the “100 Worst Alien Species in Europe.”³



Halophila stipulacea creating dense mats in the U.S. Virgin Islands



Protect Our Waterways

- If you think you see this plant (either rooted or floating), please do not move or remove it as this can create fragments that increase spread, only report it.
- It's typically found in marine environments but can tolerate variations in salinity, so keep an eye out for it in brackish waterways. It may also be found in clumps of seaweed.
- Always clean, drain, and dry all fishing gear, anchors, and boat motors before entering another ramp or water body and never dump your aquarium. Prevention is the easiest and cheapest option to keep our waterways free of damaging invasive species!

Protect Florida's native plants and wildlife by reporting all *H. stipulacea* sightings! Submit your sightings by scanning [here](#) or email photos and a location to InvasivePlants@MyFWC.com or call 850-617-9430





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Additional information for managers on how to ID this species:

Physical Characteristics

- This plant is dioecious, with separate male and female plants but primarily reproduces vegetatively.
- Its rhizomes are creeping, branched, and fleshy, with solitary, unbranched roots at each node. These roots are thick, with dense, soft root hairs.
- Plant leaves are elliptic, oblong, and pale to dark green in color with a length of 2-6cm and a width of 3-8mm. Leaf margins are spinulose.⁴
- Pairs of leaves are arranged on petioles along a shallowly rooted rhizome. Petioles range from 3-15mm long and are ensheathed in translucent scales.³



Figure 2



Figure 2. Characteristic morphology of the tropical seagrass *Halophila stipulacea*. (A) Shown are rhizomes (smooth with long internodes and leaf scars at stem base), roots (covered by small hairs, could be sand- or gravel-binding), and shoots (each carrying two linear leaf blades that contain mid and branched veins). (B-D) Flowers and fruits of *H. stipulacea*: shown are mature male (B) and female (C) flowers, alongside seeds within a cut fruit (D). Magnification (x10) showing that leaf margin is serrated (E) and minute trichomes may be present on one side of the leaf surface (F). Photos were taken by Gidon Winters (A,E,F) and Hung Manh Nguyen (B-D). (C) and (D) were adapted from Nguyen et al., 2018. All photos in this figure have been obtained with permission from the original copyright holders.

Citations

1. Campbell, J.E., Allen, A.C., Sattelberger, D.C. White, M.D., Fourqurean, J. (2024). First record of the seagrass *Halophila stipulacea* (Forsskal) Ascherson in the waters of the continental United States (Key Biscayne, Florida). *Aquatic Botany*, 196, 103820
2. Strefitaris, N., & Zenetos, A. (2006). Alien marine species in the Mediterranean – the 100 'worst invasives' and their impact. *Mediterranean Marine Science*, 7. <https://doi.org/10.12681/mms.180>
3. Roy, D., et al. (2020). DAISIE - Inventory of alien invasive species in Europe (Version 1.7). Research Institute for Nature and Forest (INBO). Checklist dataset. <https://doi.org/10.15468/ybwd3x>
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5. Winters, G., Beer, S., Willette, D. A., Viana, I. G., Chiquillo, K. L., Beca-Carretero, P., Villamayor, B., Azcárate-García, T., Shem-Tov, R., Mwabvu, B., Migliore, L., Rotini, A., Oscar, M. A., Belmaker, J., Gamliel, I., Alexandre, A., Engelen, A. H., Procaccini, G., & Rilov, G. (2020). The tropical seagrass *Halophila stipulacea*: Reviewing what we know from its native and invasive habitats, alongside identifying knowledge gaps. *Frontiers in Marine Science*, 7, Article 300. <https://doi.org/10.3389/fmars.2020.00300>
6. Willette, D. A. (2015). *Halophila stipulacea* (halophila seagrass). *CABI Compendium*. <https://doi.org/10.1079/cabicompendium.114669>