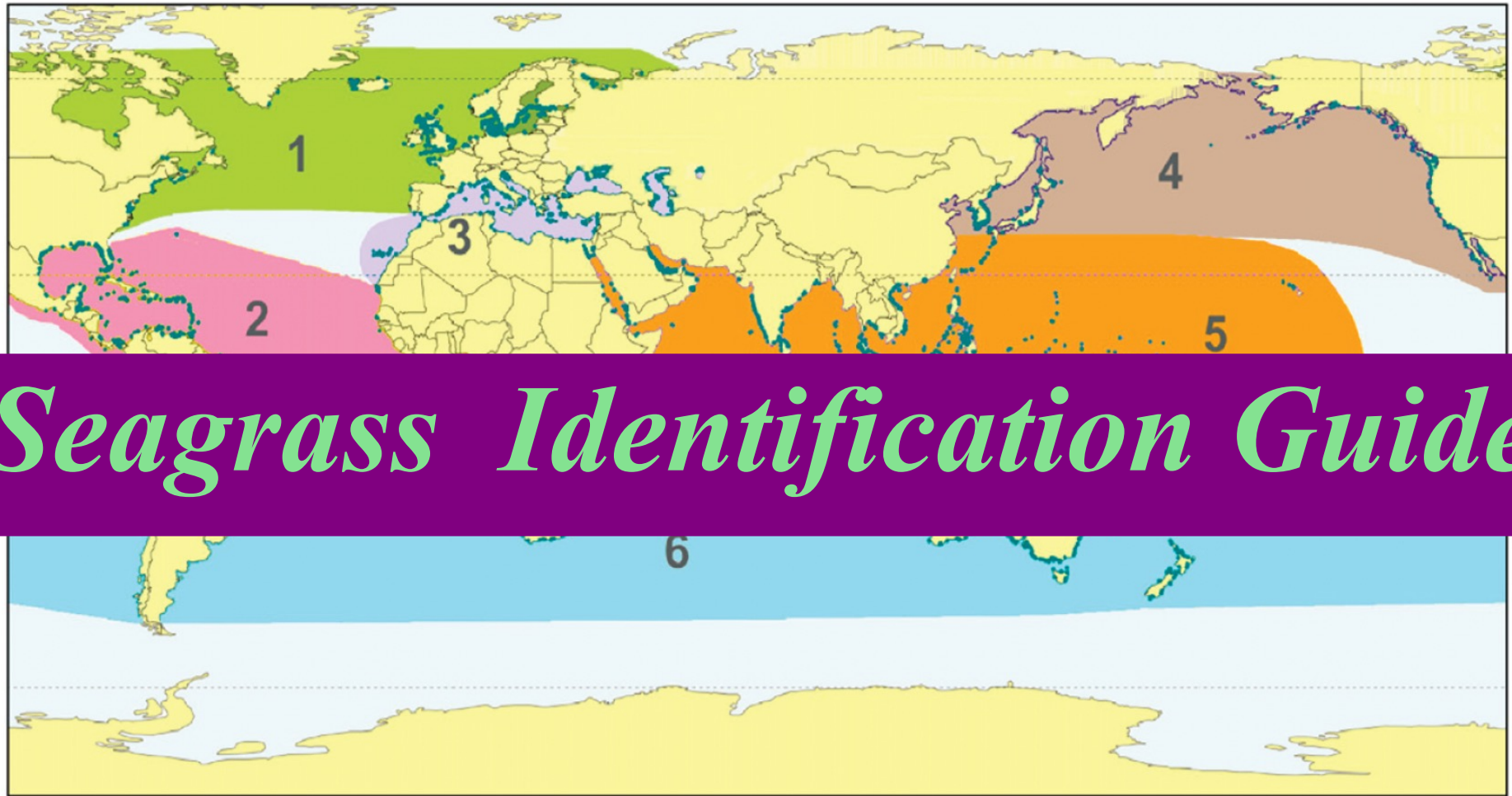
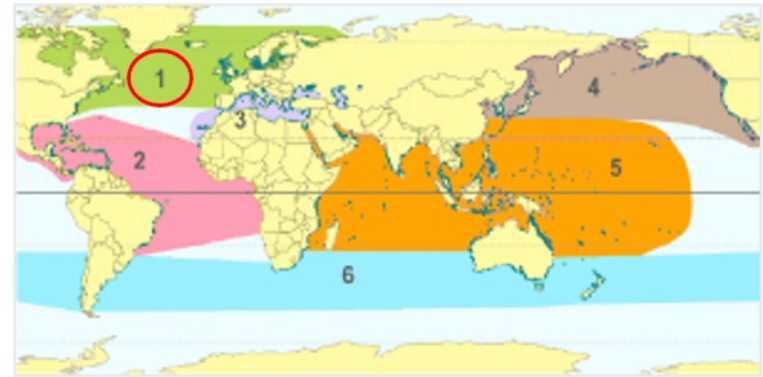


Bioregional Photographic Guide and Identification Key to the Seagrass Species of the World and their Flowering Parts



Global seagrass distribution shown as blue points and polygons and geographic bioregions: 1. Temperate North Atlantic, 2. Tropical Atlantic, 3. Mediterranean, 4. Temperate North Pacific, 5. Tropical Indo-Pacific, 6. Temperate Southern Oceans (Short et al. 2007 JEMBE 350: 3-20).



Seagrass Bioregional Species Key:

1 Temperate North Atlantic Bioregion

Species identification key including photo guide, global range maps, drawings, and flowers.

From:

SeagrassNet

Fred Short
University of New Hampshire
603-659-3313 cell
fredtshort@gmail.com
www.SeagrassNet.org

With ratings from:

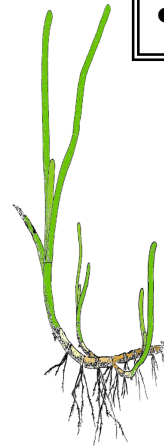
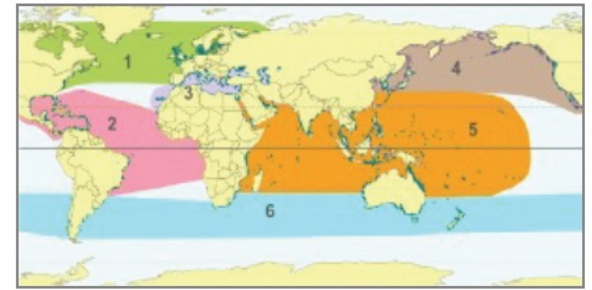
IUCN Red List of Threatened Species

Seagrass Red List

*Bioregional Guide to the Seagrass Species of the World. 2025. F.T. Short.
Available on-line www.SeagrassNet.org.*

Zm *Zostera marina*

Bioregion
1

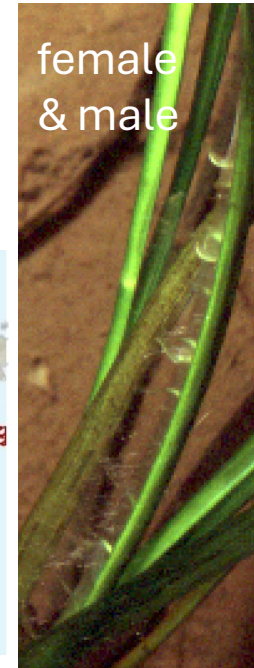


Key

- Flat leaves to 3 m with closed sheath
- Leaf tip smoothly rounded
- Rhizome robust with terminal shoots
- 2 bundles of roots per node
- Monoecious

Flowering Parts

female
& male



female



seedling



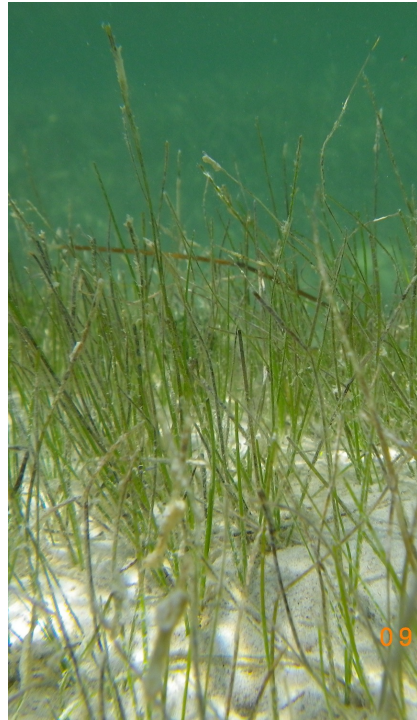
seed



Extinction Risk: Least Concern



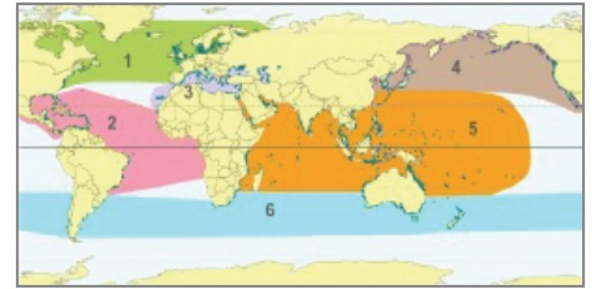
Hw *Halodule wrightii*



Extinction Risk: Least Concern



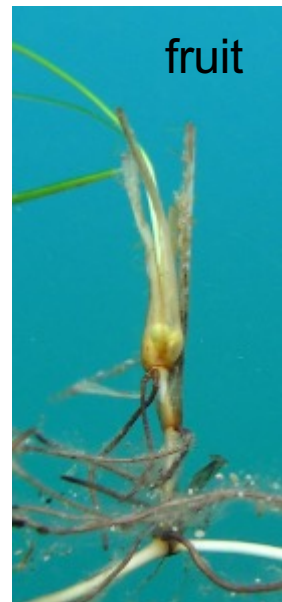
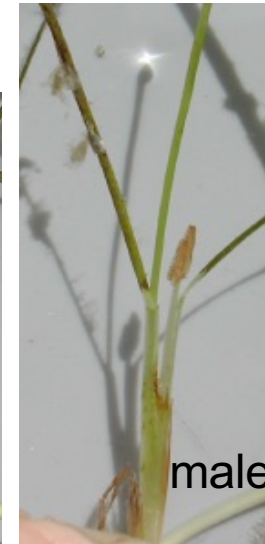
Bioregion
1



Key

- Leaves flat and thin
- Leaf tip usually 2 points
- Leaves 2-22 cm long
- Rhizome whitish
- Dioecious
- Depth -1 to 20 m
- Sometimes leaves red or black

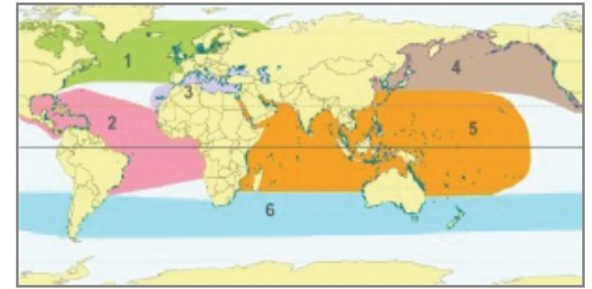
Flowering Parts



Rm *Ruppia maritima*



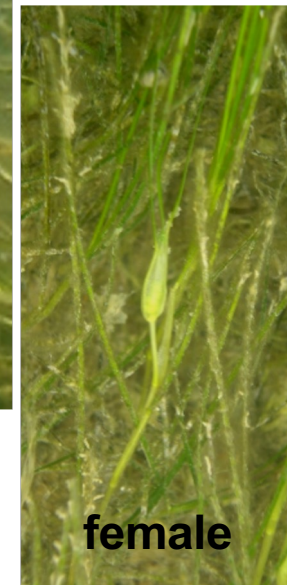
Bioregion
1



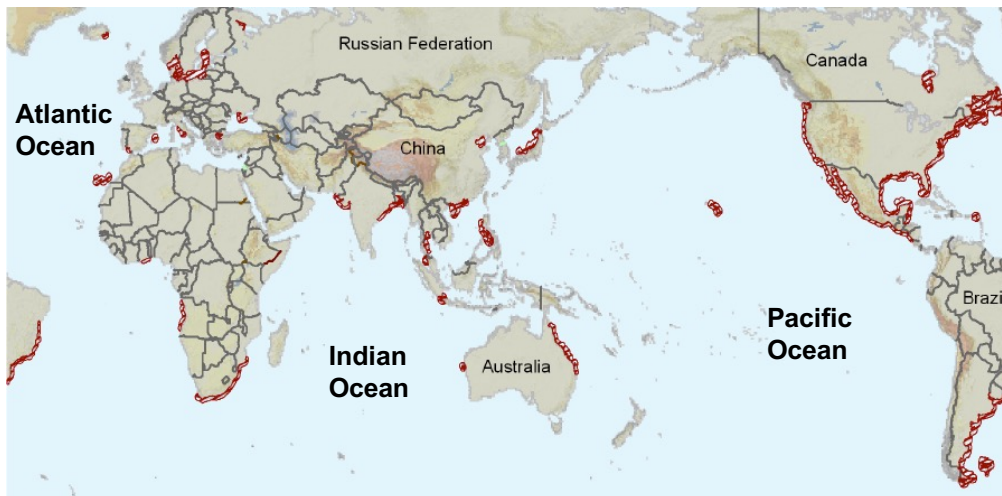
Key

- Leaves flat and thin
- Leaf tapers to tip to point
- Leaves 4-22 cm long
- Depth -1 to 20 m

Flowering Parts



Extinction Risk: Least Concern



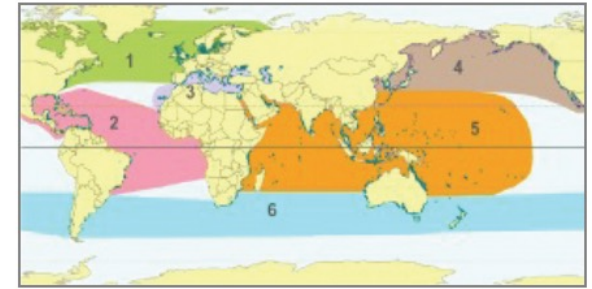
Rc *Ruppia cirrhosa*



Extinction Risk: Least Concern



Bioregion
1



Key

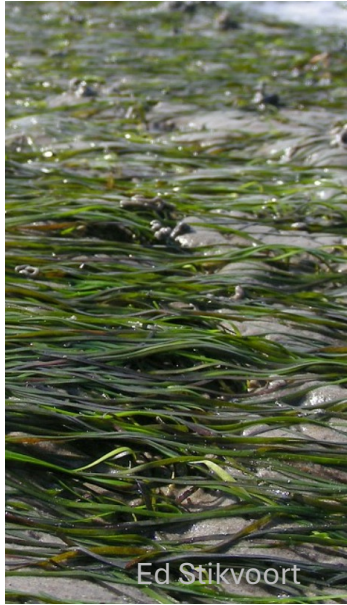
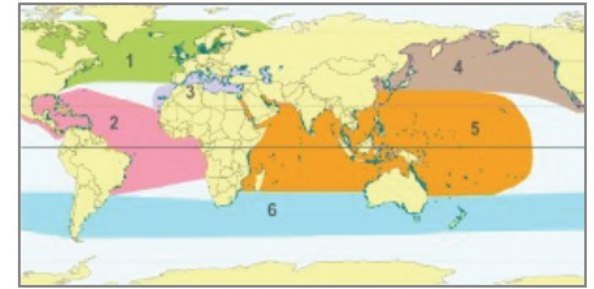
- Leaves flat and thin
- Leaf tapers to tip, 25 cm long
- Fruits cluster on spiral stem
- Depth intertidal to 20 m

Flowering Parts

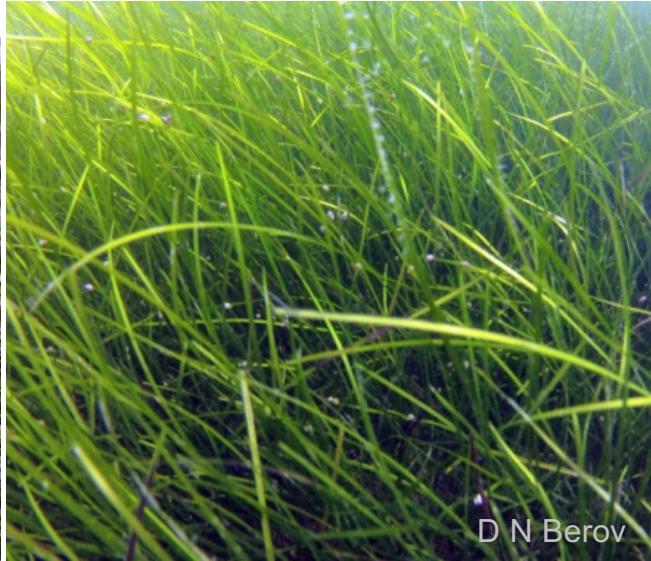


Zn *Nanozostera noltii*

Bioregion
1



Ed Stikvoort

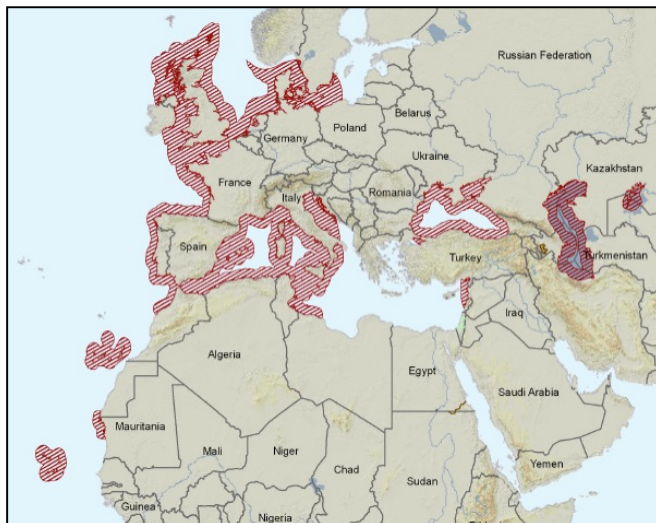


D N Berov

Key

- Flat narrow leaves to 30 cm with open sheath
- Leaf tip rounded and unevenly notched
- Thin rhizome, shoots at each node
- Flowers on branched stem
- Monoecious

Extinction Risk: Least Concern



Flowering Parts

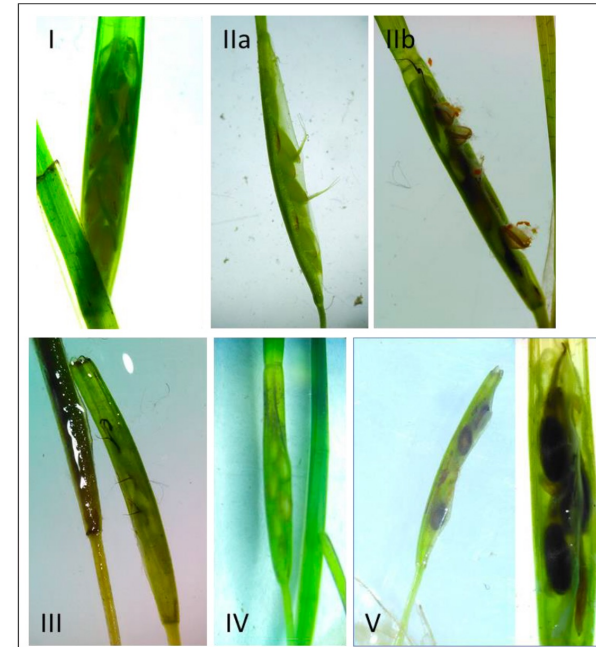


Ankel et al 2021

Stage

Description

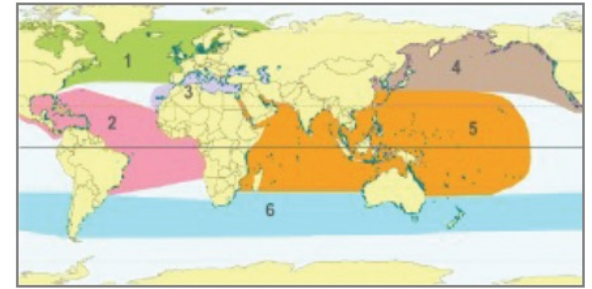
- | | |
|-----|---|
| I | Yellow-green spathe, sheath closed; pistils and stamens are visible, aligned onto the stem |
| II | Pistils (IIa) and/or stamens erected (IIb); styles and stigma and/or anthers are outside the sheath |
| III | Stigma brown, start to depart from spathe; often with stamens already detached from the spathe |
| IV | Green spathe with immature seeds; sheath closed |
| V | Green/brown spathe, dark brown seeds are visible, sheath open |



Found in the
Eastern Atlantic

Cn *Cymodocea nodosa*

Bioregion
1



Key

- Flat leaves to 30 cm
- Leaf tip rounded, slightly serrated
- Rhizome robust with one root per node
- Flowers emerge from sheath
- Dioecious



Flowering
Parts

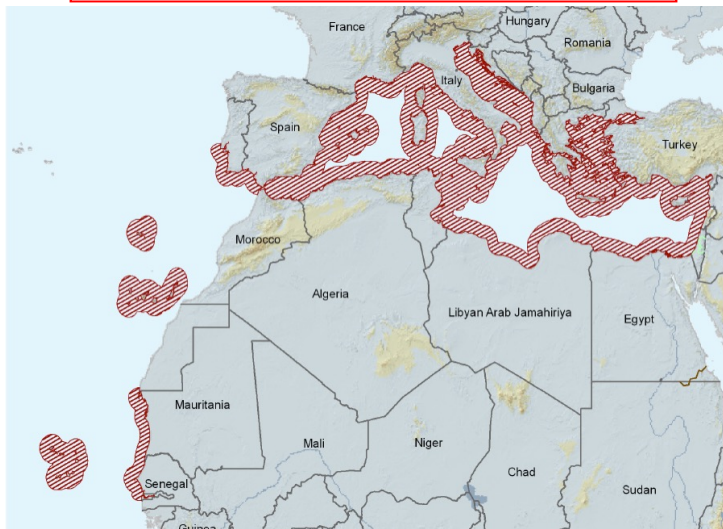
fruit



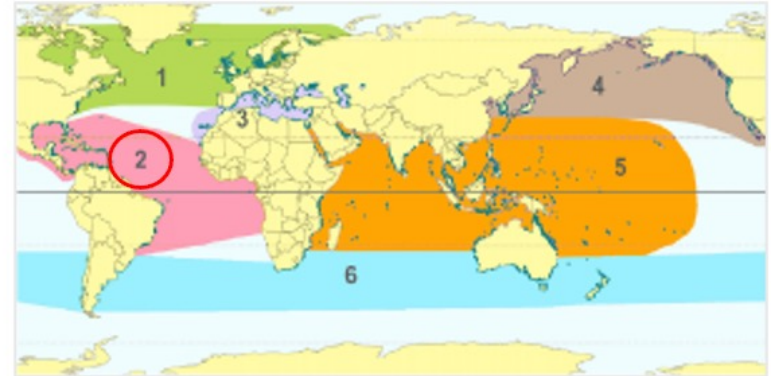
male



Extinction Risk: Least Concern



Found in the
Eastern Atlantic



Seagrass Bioregional Species Key:

2

Tropical Atlantic Bioregion

Species identification key including photo guide, global range maps, drawings, and flowers.

From:

SeagrassNet

Fred Short
University of New Hampshire
603-659-3313 cell
fredtshort@gmail.com
www.SeagrassNet.org

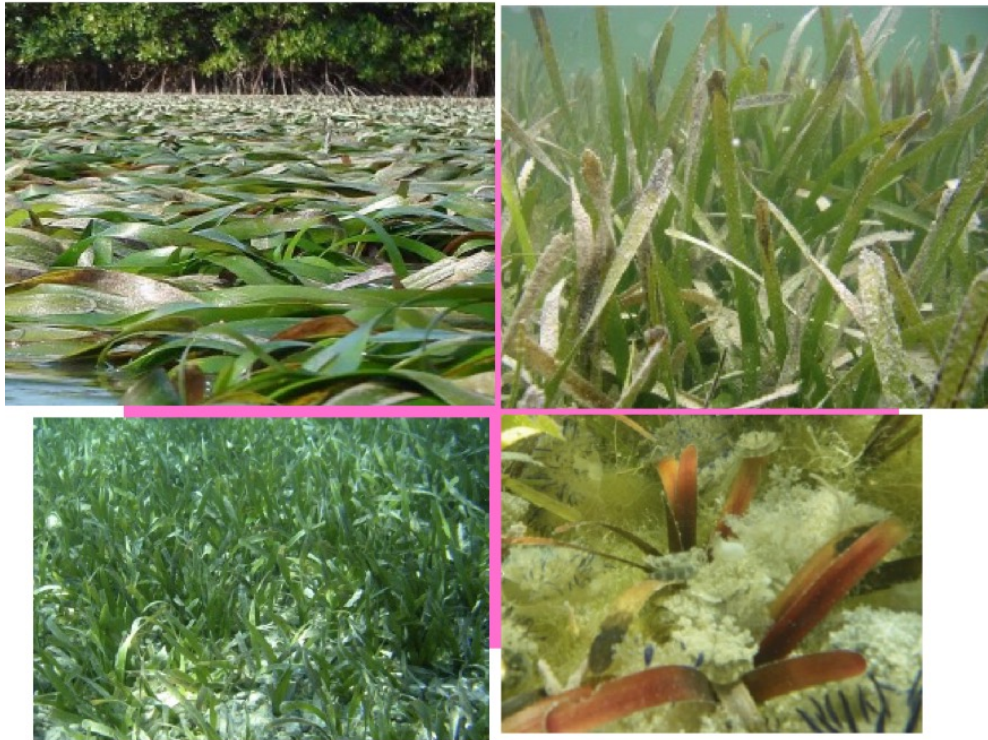
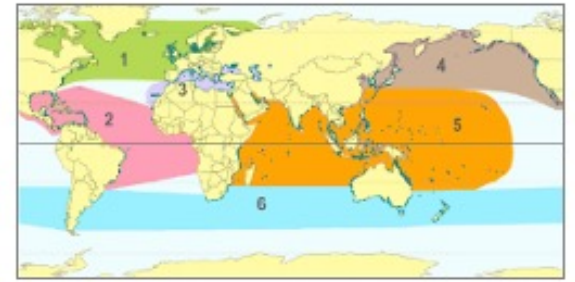
With ratings from:

IUCN Red List of Threatened Species

Seagrass Red List

*Bioregional Guide to the Seagrass Species of the World. 2025. F.T. Short.
Available on-line www.SeagrassNet.org.*

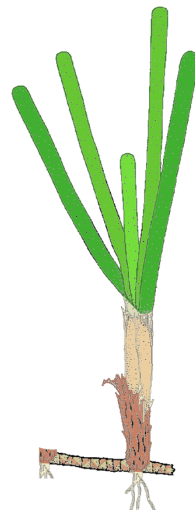
Tt *Thalassia testudinum*



Key

- Flat leaves with small dark tannin cells
- Fibrous leaf sheath
- Rhizome with scale between nodes
- Leaves 10-60 cm long
- Dioecious
- Often with red leaves

Extinction Risk: Least Concern

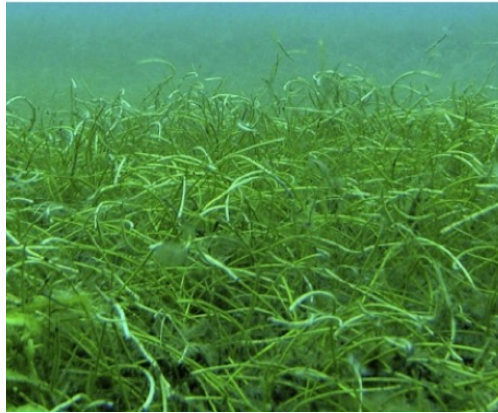
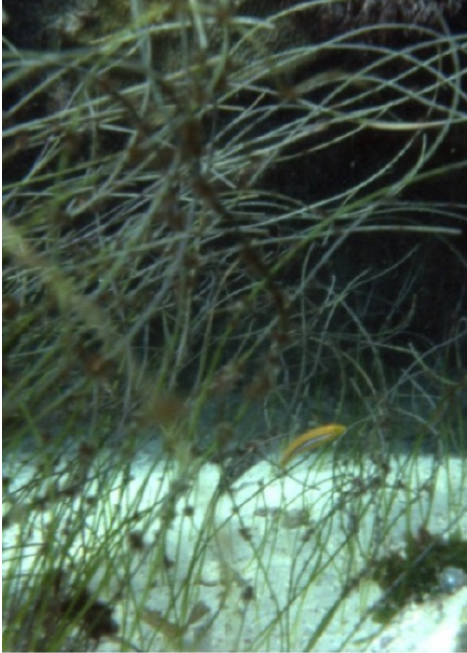
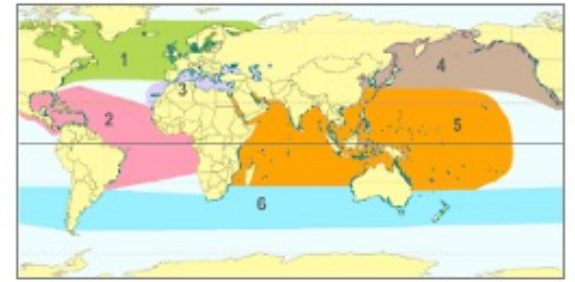


Flowering Parts

male buds



Sf *Syringodium filiforme*



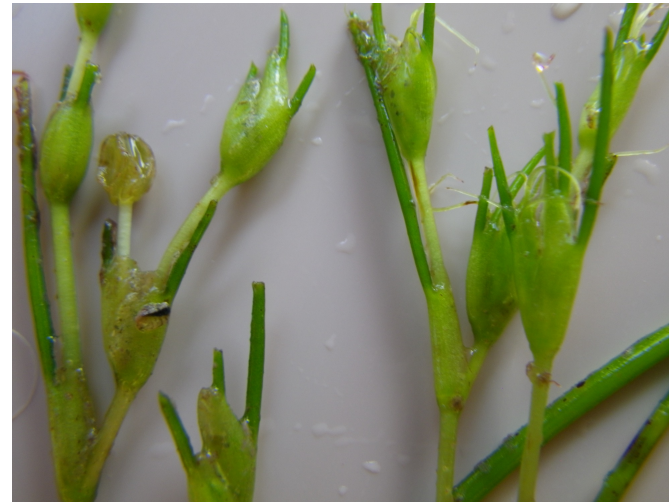
Extinction Risk: Least Concern



Key

- Leaves cylindrical
- Leaf tips taper
- Leaves 10-60 cm long
- Dioecious

Flowering Parts



Male

female



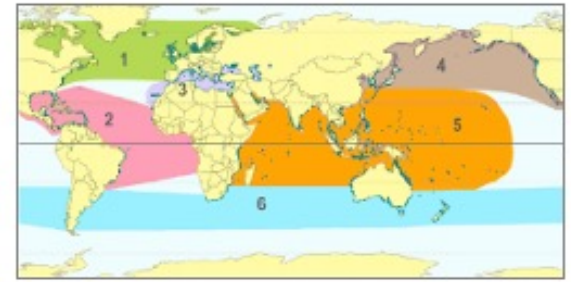
fruits

Hw *Halodule wrightii*



Bioregion

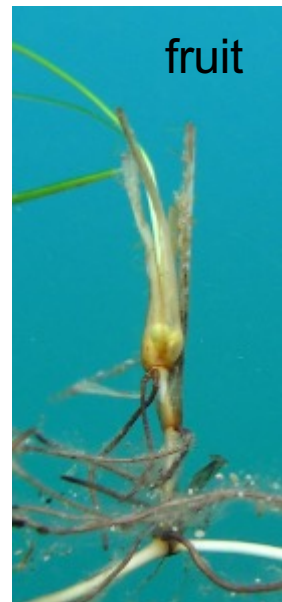
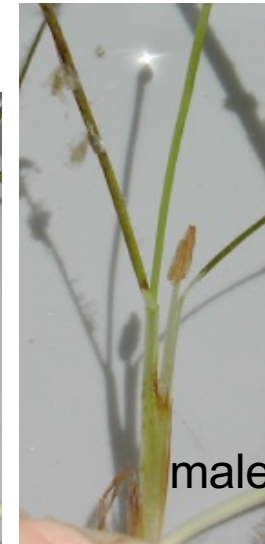
2



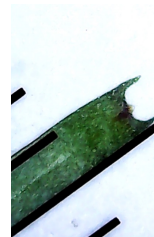
Key

- Leaves flat and thin
- Leaf tip usually 2 points
- Leaves 2-22 cm long
- Rhizome whitish
- Dioecious
- Depth -1 to 20 m
- Sometimes leaves red or black

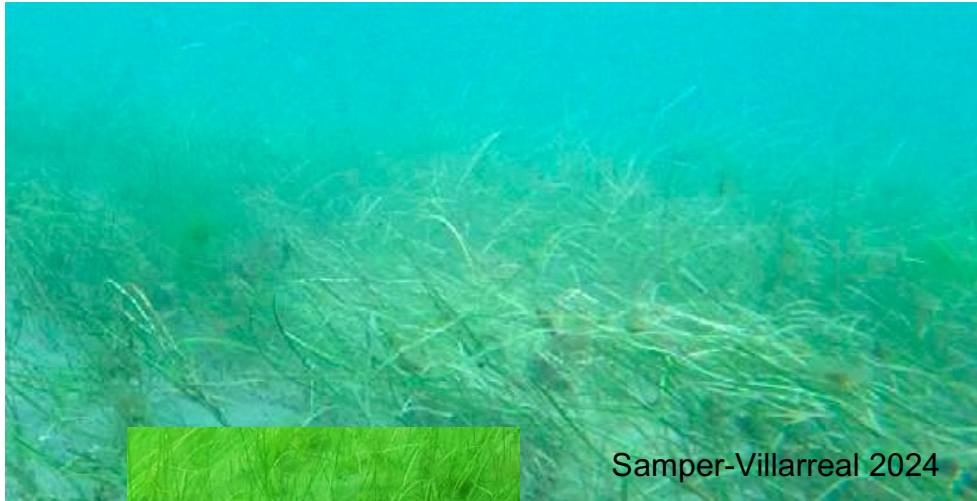
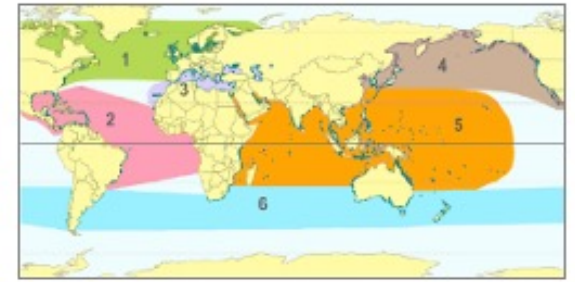
Flowering Parts



Extinction Risk: Least Concern



Hv *Halodule beaudettei*

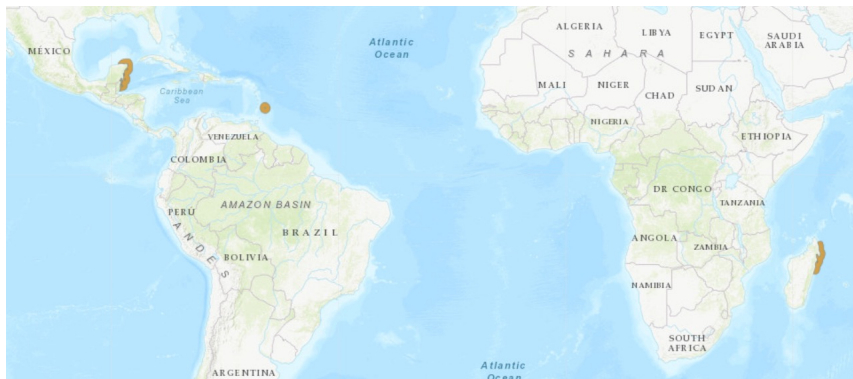


Samper-Villarreal 2024

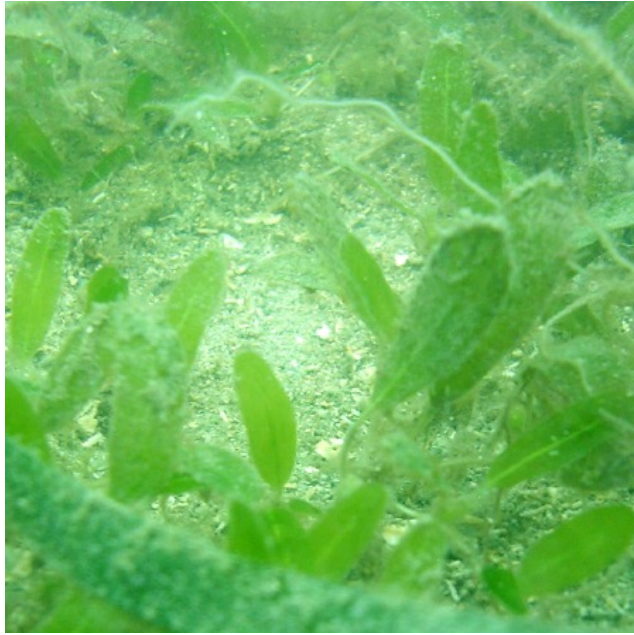
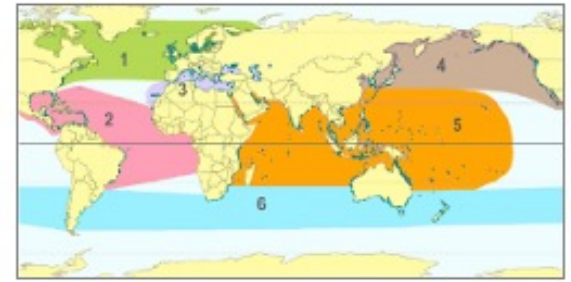
Key

- Leaves flat and thin
- Leaf tip with 3 points, long central tooth
- Leaves 15 cm long
- Dioecious
- Depth 0 to 10 m

Extinction Risk: Data Deficient



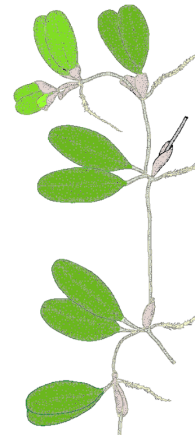
Hd *Halophila decipiens*



Key

- Paddle-shaped leaves
- Leaf hairs on both sides
- Leaf margins serrated
- Leaves 1-4 cm long
- Monoecious
- Depth 0 to 30 m

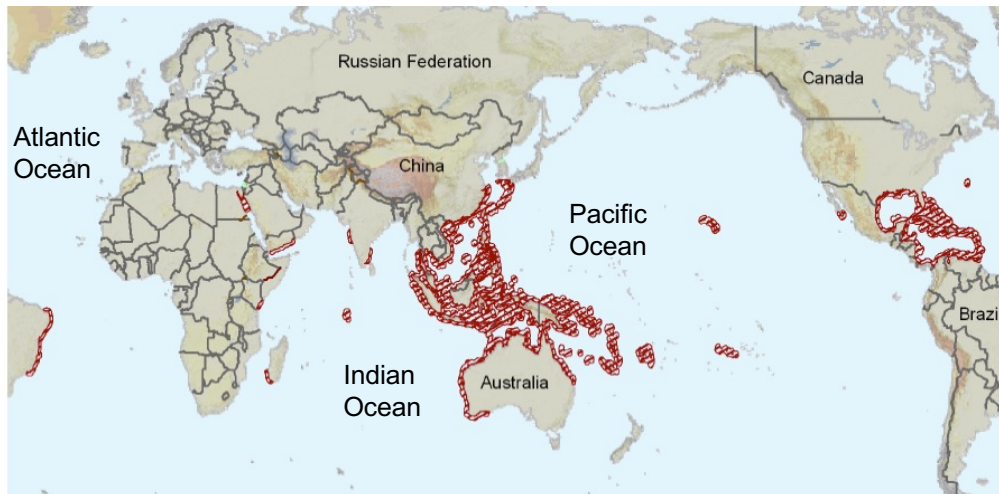
Flowering Parts



male & female

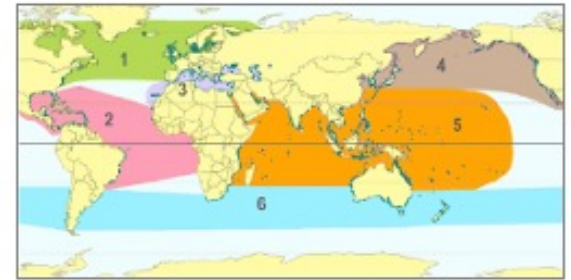


fruit



Extinction Risk: Least Concern

HI *Halophila baillonii*

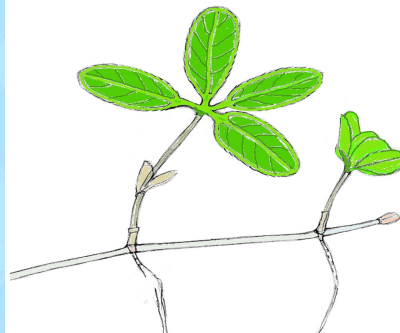


Key

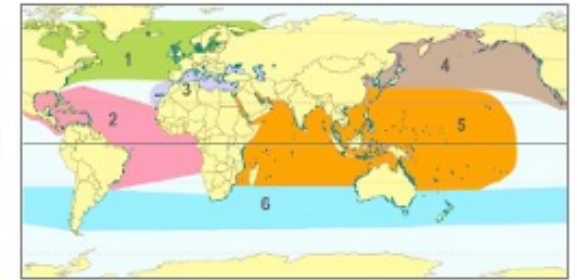
- Leaves in rosette on 1-6 cm stem
- 4-5 leaves per rosette
- Leaf margins serrated
- Leaves 2-3 cm long, rounded tip
- Dioecious

Extinction Risk: **Vulnerable**

Flowering Parts



He *Halophila engelmanni*



Copyright M. K. Wicksten 2000



Sarah Lardizabal

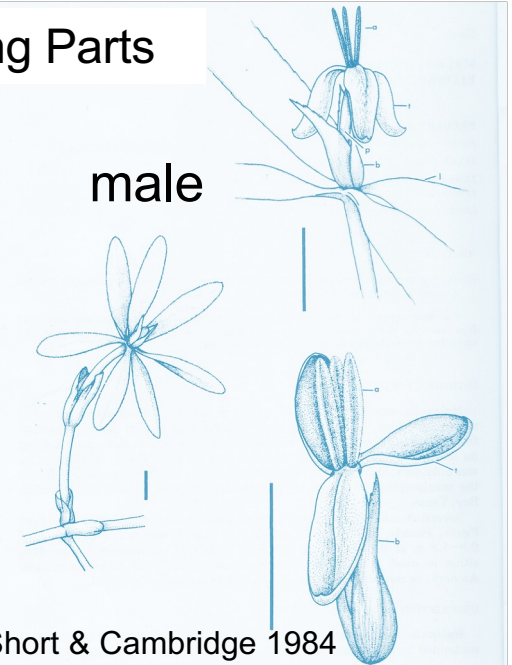
Extinction Risk: **Near Threatened**

Key

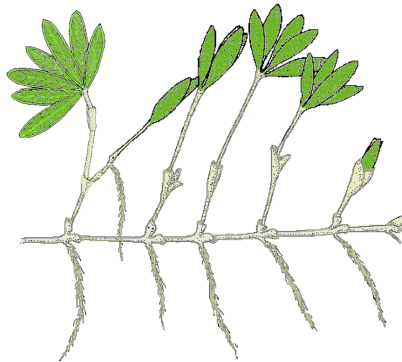
- Leaves in rosette on stem
- 5-8 leaves per rosette
- Pointed leaves with small petiole
- Leaves 2-5 cm long
- Dioecious
- Depth 0 to 5 m

Flowering Parts

male

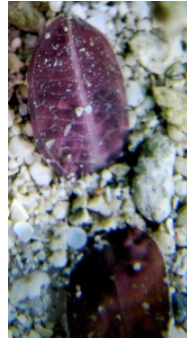
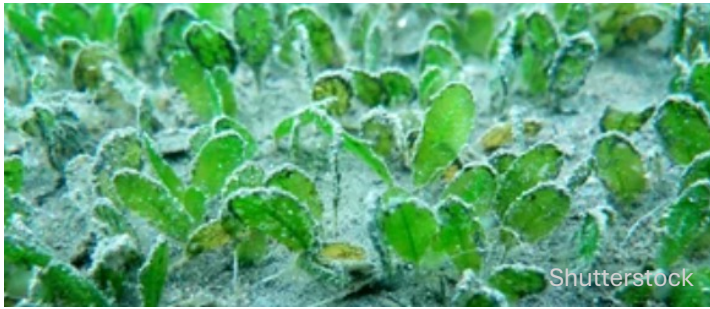


Short & Cambridge 1984



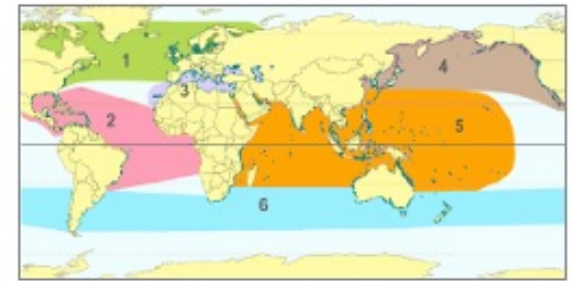
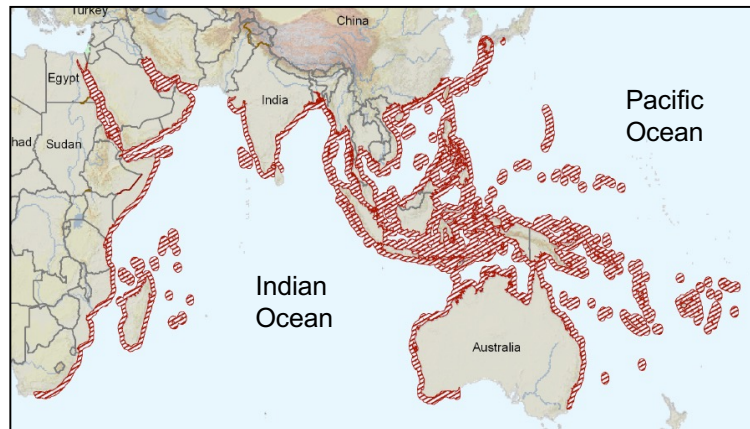
Ho *Halophila ovalis*

Previously *Halophila johnsonii* in Florida, USA



Shutterstock

Extinction Risk: Least Concern



Key

- Oval-shaped leaves, 1-4 cm long
- Leaves often red or purple
- No leaf hairs
- Leaf margins smooth
- Depth 0 to 10 m
- Dioecious



Flowering Parts



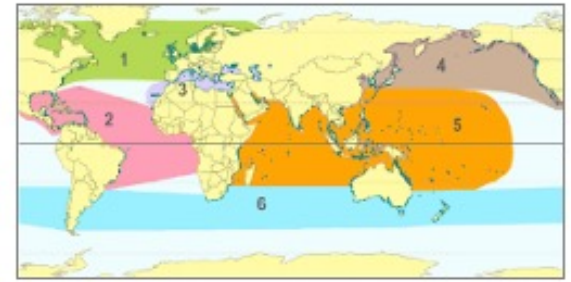
female



male

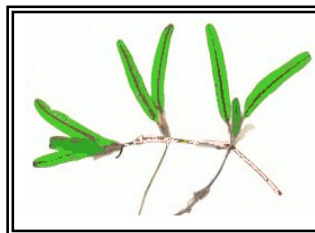
Hs *Halophila stipulacea*

Invasive species



- Elongated paddle-shaped leaves to 6cm
- Leaf stippled and bullate, tip serrated
- Distinctive scales cover the stem
- Depth 0 to 60m
- Dioecious
- Range expanding

Extinction Risk: Least Concern



Flowering Parts

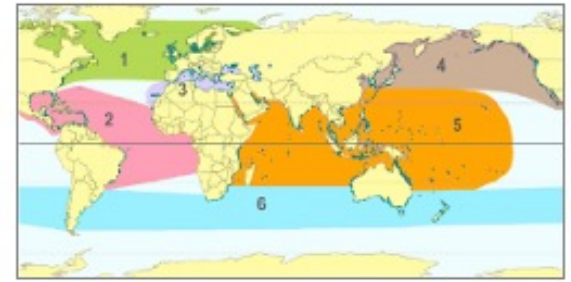


male



female

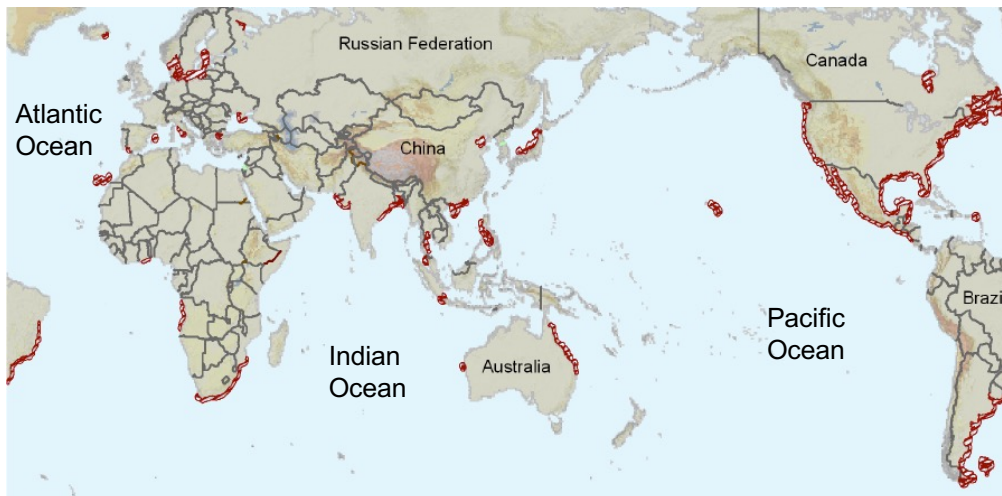
Rm *Ruppia maritima*



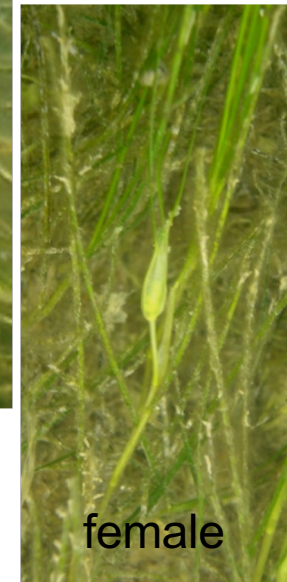
Key

- Leaves flat and thin
- Leaf tapers to tip
- Leaves 4-22 cm long
- Depth -1 to 20 m

Extinction Risk: Least Concern

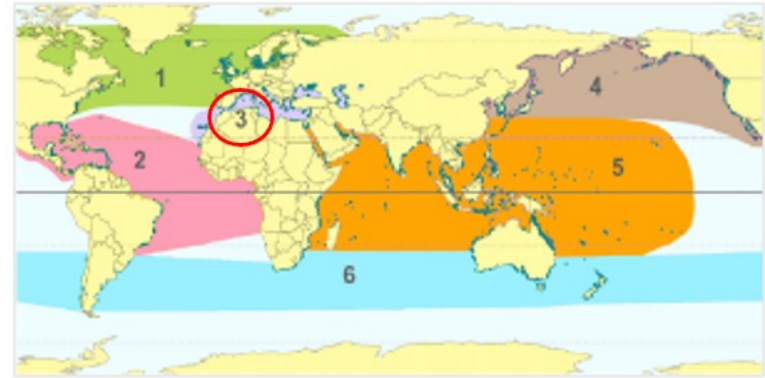


Flowering Parts



fruit





Seagrass Bioregional Species Key:

3

Mediterranean Bioregion

Species identification key including photo guide, global range maps, drawings, and flowers.

From:

SeagrassNet

Fred Short
University of New Hampshire
603-659-3313 cell
fredtshort@gmail.com
www.SeagrassNet.org

With ratings from:

IUCN Red List of Threatened Species

[Seagrass Red List](#)

*Bioregional Guide to the Seagrass Species of the World. 2025. F.T. Short.
Available on-line www.SeagrassNet.org.*

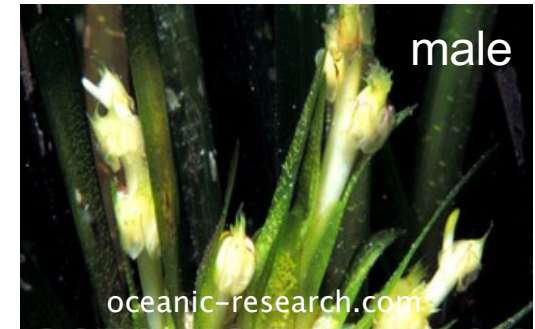
Po *Posidonia oceanica*



Key

- Leaves 40-50 cm
- Leaf tip rounded
- Rhizome robust, brush-like and fibrous
- Flowers emerge on a stem
- Monoecious

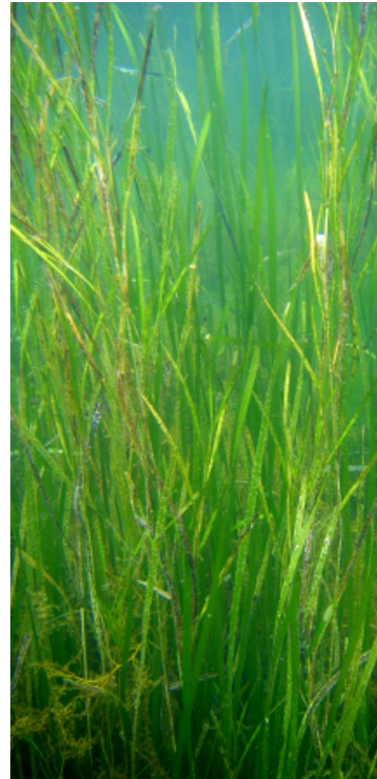
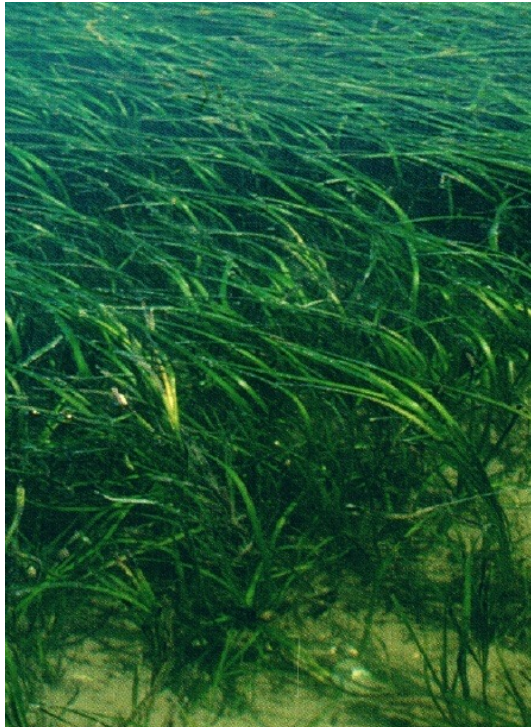
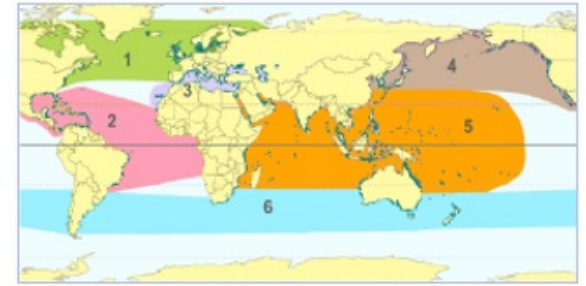
Flowering Parts



Extinction Risk: Least Concern

Zm *Zostera marina*

Bioregion
3

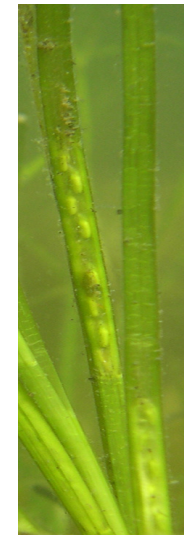


Key

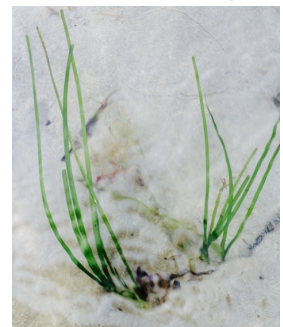
- Flat leaves to 3 m with closed sheath
- Leaf tip smoothly rounded
- Rhizome robust with terminal shoots
- 2 bundles of roots per node
- Monoecious

Flowering Parts

female
& male



Seedling

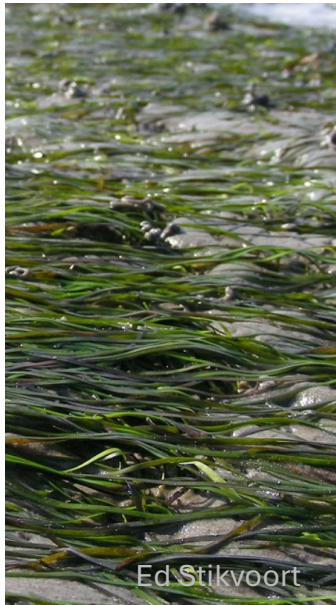


Extinction Risk: Least Concern



Zn *Nanozostera noltii*

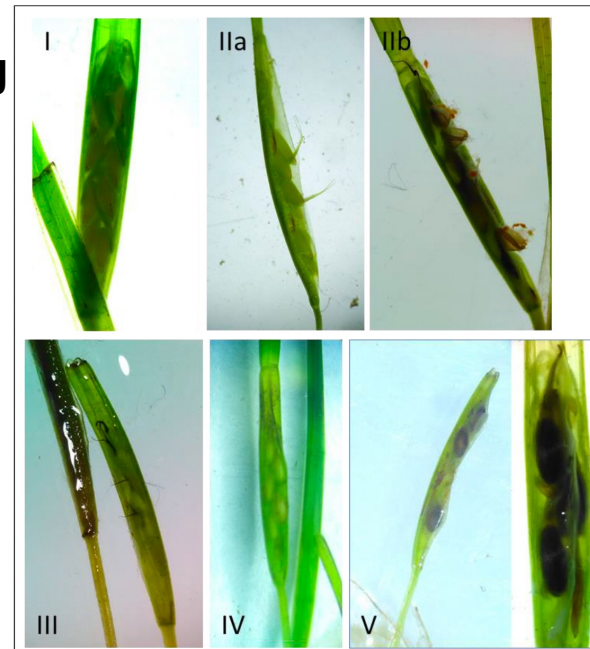
Bioregion
3



Key

- Flat narrow leaves to 30 cm with open sheath
- Leaf tip rounded and unevenly notched
- Thin rhizome, shoots at each node
- Flowers on branched stem
- Monoecious

Flowering Parts



Ankel et al 2021

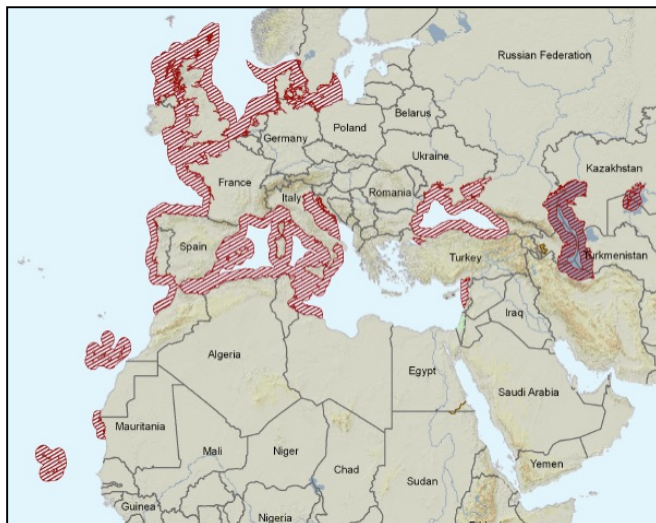
Stage

Description

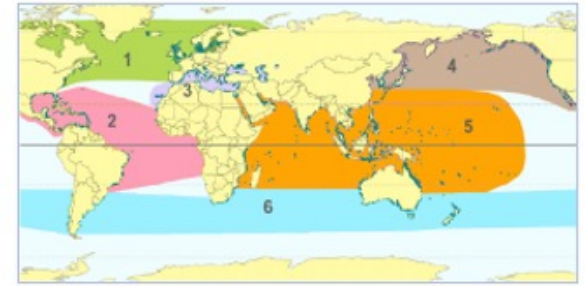
- | | |
|-----|---|
| I | Yellow-green spathe, sheath closed; pistils and stamens are visible, aligned onto the stem |
| II | Pistils (IIa) and/or stamens erected (IIb); styles and stigma and/or anthers are outside the sheath |
| III | Stigma brown, start to depart from spathe; often with stamens already detached from the spathe |
| IV | Green spathe with immature seeds; sheath closed |
| V | Green/brown spathe, dark brown seeds are visible, sheath open |



Extinction Risk: Least Concern



Cn *Cymodocea nodosa*



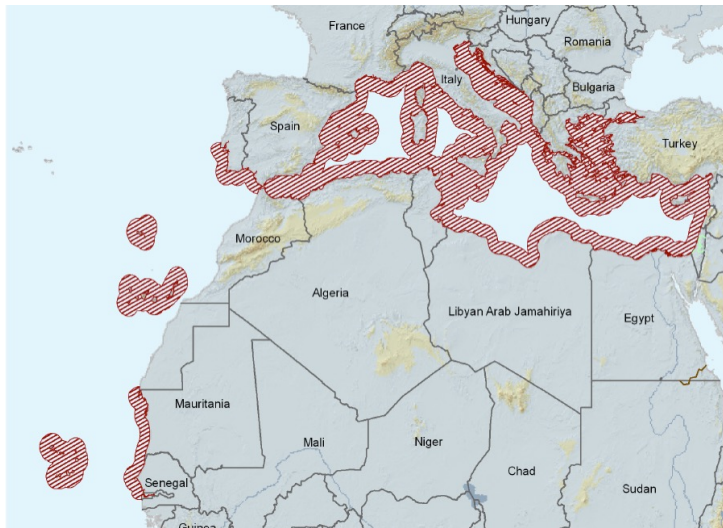
Key

- Flat leaves to 30 cm
- Leaf tip rounded, slightly serrated
- Rhizome robust with one root per node
- Flowers emerge from sheath
- Dioecious

Flowering
Parts

fruit

Extinction Risk: Least Concern



male



Hd *Halophila decipiens*

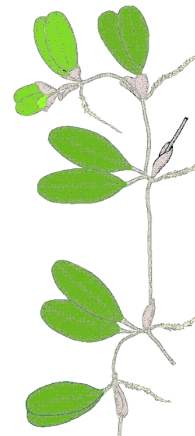
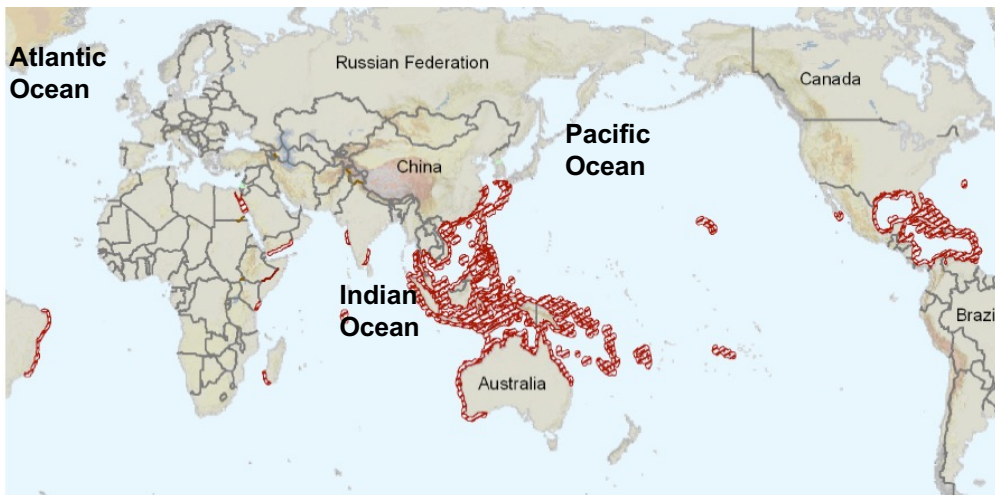


Key

- Paddle-shaped leaves
- Leaf hairs on both sides
- Leaf margins serrated
- Leaves 1-4 cm long
- Monoecious
- Depth 0-30 m

Flowering Parts

Extinction Risk: Least Concern



male & female

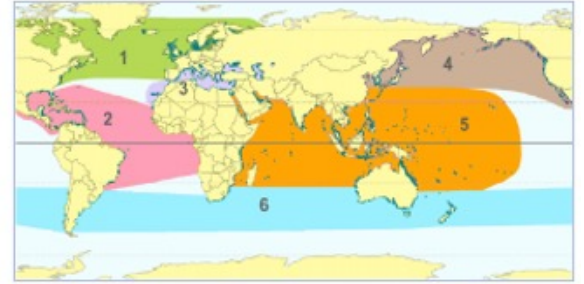


fruit

Hs *Halophila stipulacea*

Invasive species

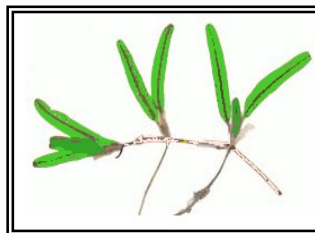
Bioregion
3



Key

- Elongated paddle-shaped leaves to 6cm
- Leaf stippled and bullate, tip serrated
- Distinctive scales cover the stem
- Depth 0 to 60m
- Dioecious
- Range expanding

Extinction Risk: Least Concern



Flowering Parts



male



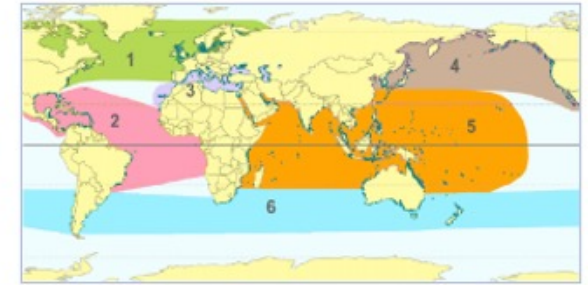
female

Rc *Ruppia cirrhosa*



flora.nhm-wien.ac.at

Extinction Risk: Least Concern



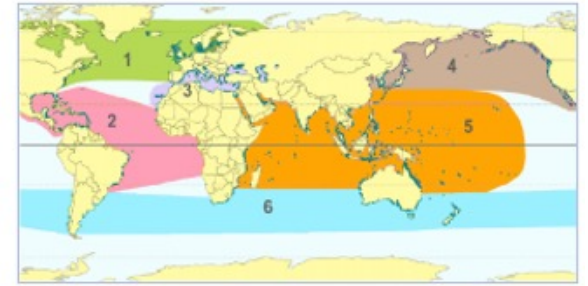
Key

- Leaves flat and thin
- Leaf tapers to tip, 25 cm long
- Fruits cluster on spiral stem
- Depth intertidal to 20 m

Flowering Parts



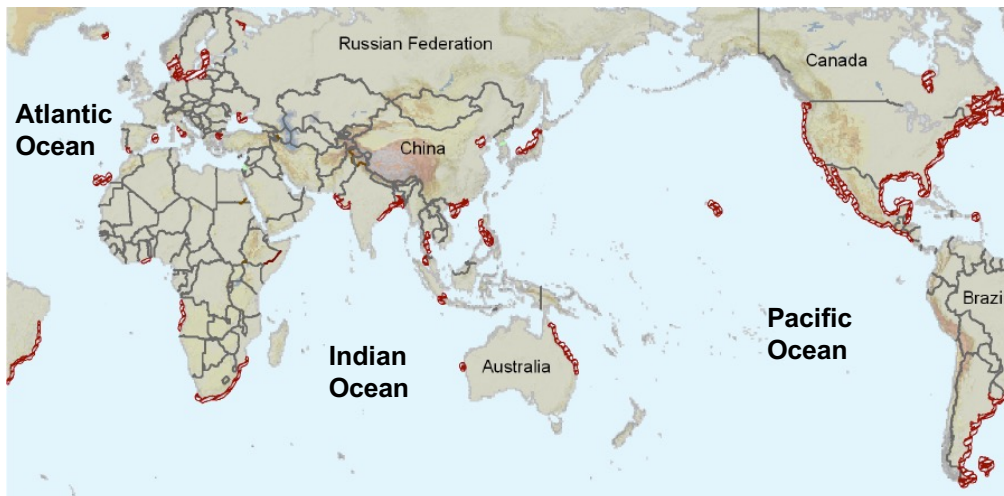
Rm *Ruppia maritima*



Key

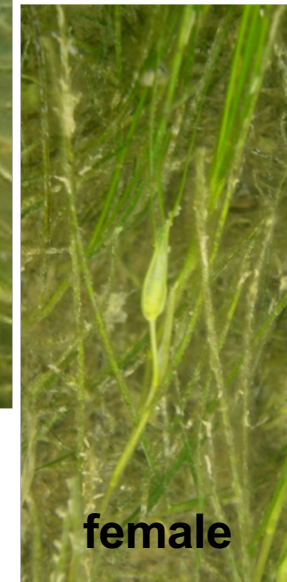
- Leaves flat and thin
- Leaf tapers to tip
- Leaves 4-22 cm long
- Depth -1 to 20 m

Extinction Risk: Least Concern



male

Flowering Parts



female

fruit



Hw *Halodule wrightii*



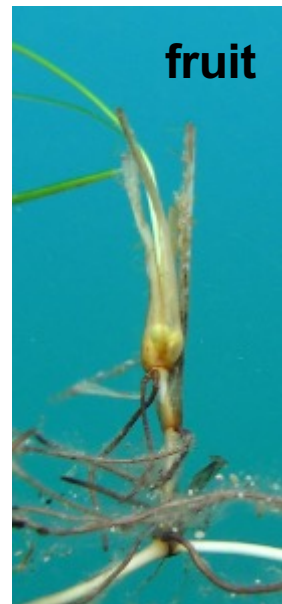
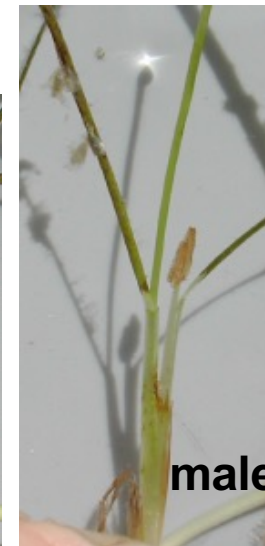
Extinction Risk: Least Concern

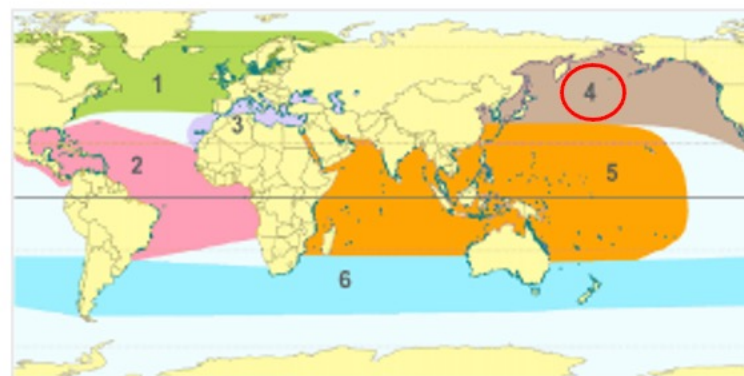


Key

- Leaves flat and thin
- Leaf tip with 2-3 points
- Leaves 2-22 cm long
- Rhizome whitish
- Dioecious
- Depth -1 to 20 m
- Sometimes leaves red or black

Flowering Parts





Seagrass Bioregional Species Key:

4 Temperate North Pacific Bioregion

Species identification key including photo guide, global range maps, drawings, and flowers.

From:

SeagrassNet

Fred Short
University of New Hampshire
603-659-3313 cell
fredtshort@gmail.com
www.SeagrassNet.org

With ratings from:

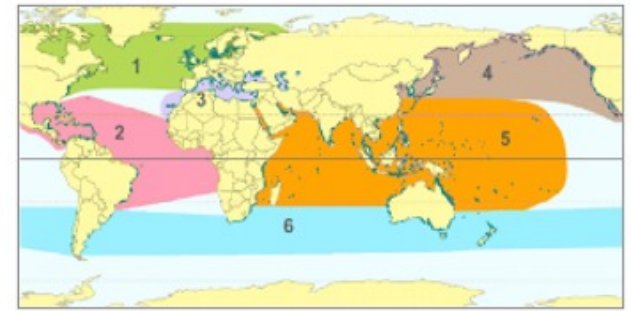
IUCN Red List of Threatened Species

Seagrass Red List

*Bioregional Guide to the Seagrass Species of the World. 2025. F.T. Short.
Available on-line www.SeagrassNet.org.*

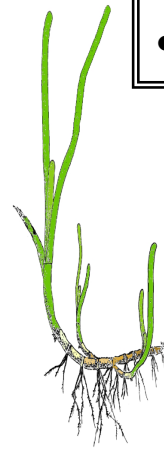
Zm *Zostera marina*

Bioregion
4



Key

- Flat leaves to 3 m with closed sheath
- Leaf tip smoothly rounded
- Rhizome robust with terminal shoots
- 2 bundles of roots per node
- Monoecious



Flowering Parts

female
& male



female



Seedling



Seed



Extinction Risk: Least Concern



Zj *Nanozostera japonica*

Bioregion
4

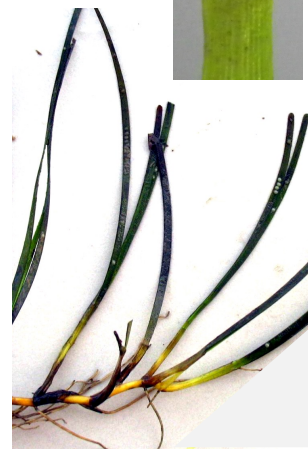
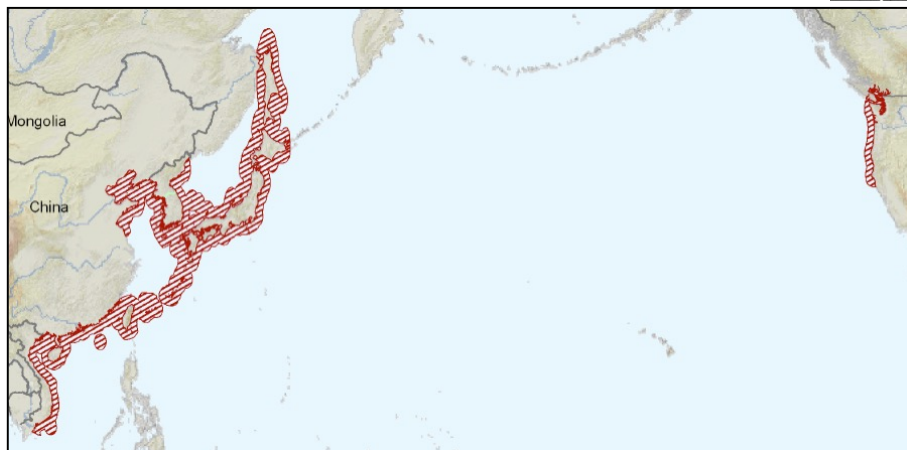


- Key
- Notched rounded leaf tip
 - Narrow leaf blades (2-5 mm)
 - Leaves 7-30 cm long
 - Monoecious
 - Intertidal - shallow subtidal

Flowering Parts

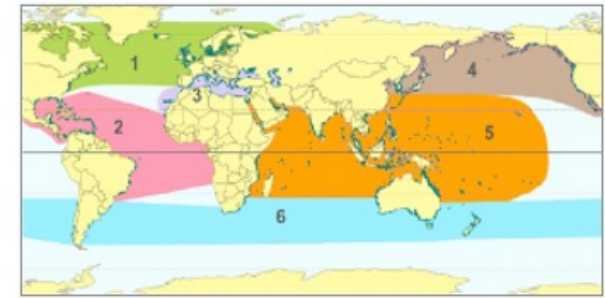


Extinction Risk: Least Concern



Pr *Phyllospadix serrulatus*

Bioregion
4



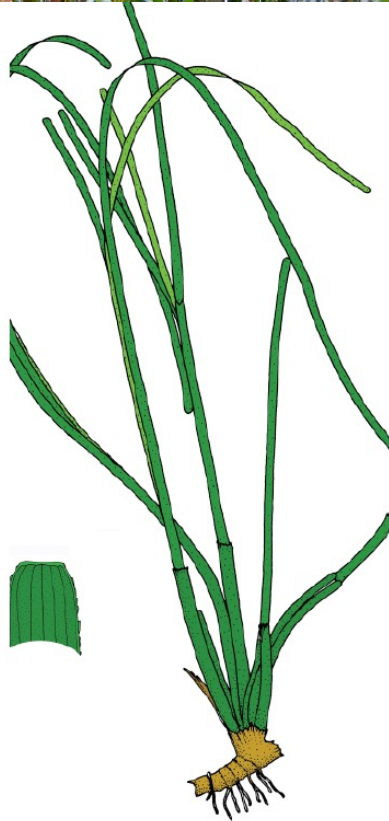
Attached to rocks



Key

- Flat leaves to 130 cm
- Rounded/flattened tip
- Serrated leaf edges
- 5-7 leaf veins
- Dioecious

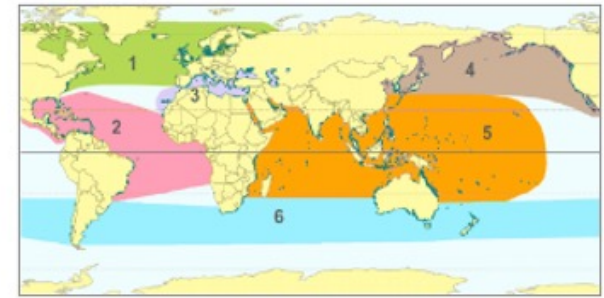
Extinction Risk: Least Concern



Ps *Phyllospadix scouleri*

Attached to rocks

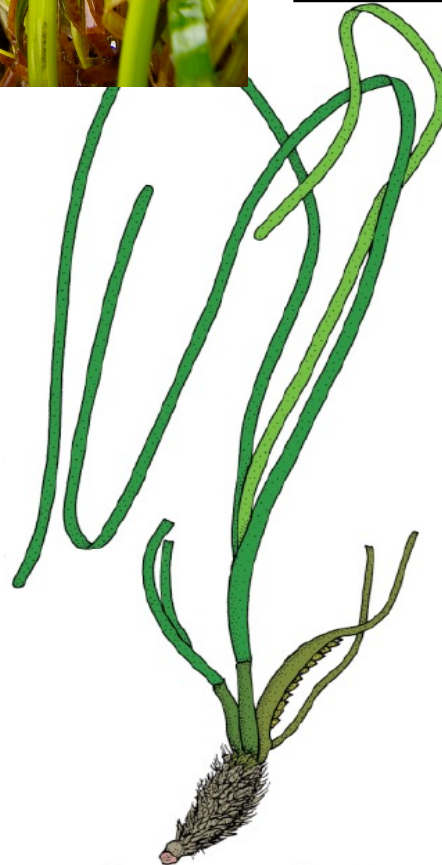
Bioregion
4



Key

- Leaves, bi-convex cross-section, to 200cm
- Rounded/flattened/notched tip
- Rhizome internodes with yellow/gray fibers
- 3 leaf veins
- Dioecious

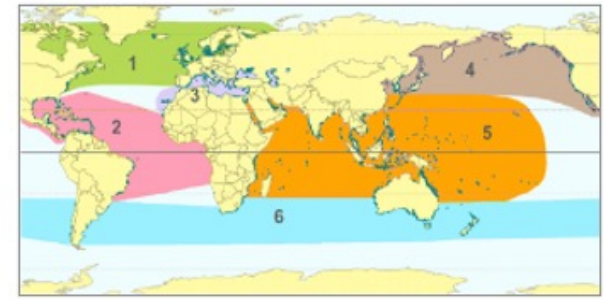
Extinction Risk: Least Concern



Pt *Phyllospadix torreyi*

Bioregion

4



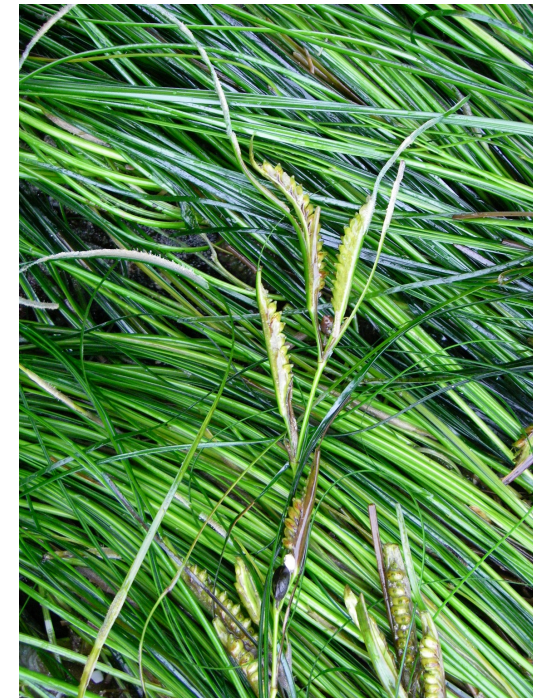
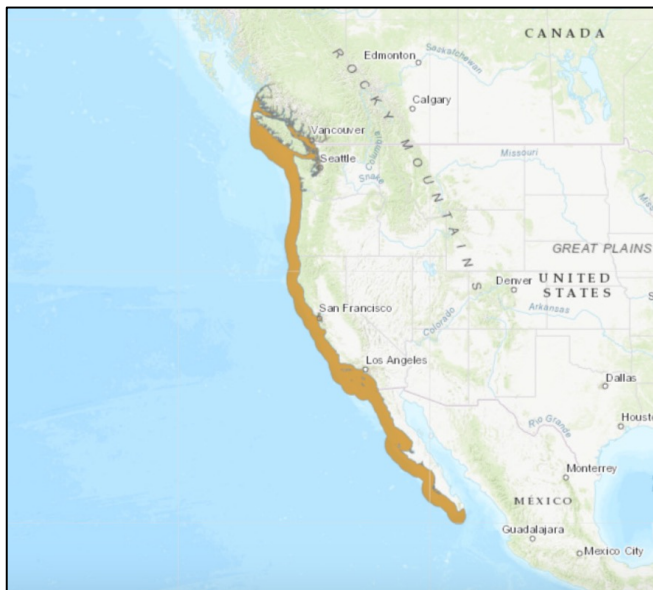
Attached to rocks



Key

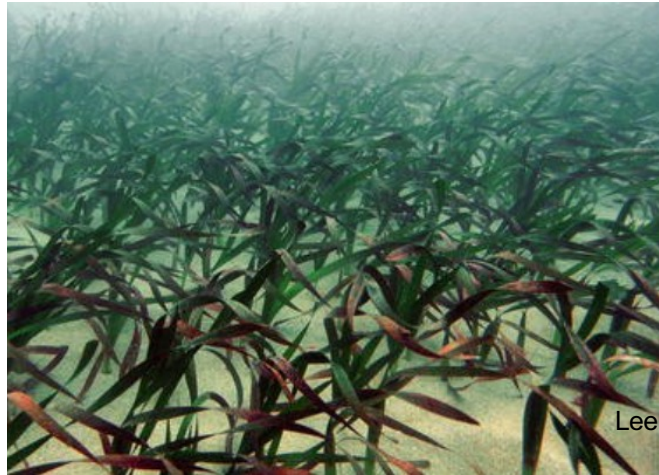
- Rolled leaves to 200cm
- Rounded slightly notched tip
- 3 leaf veins
- Dioecious

Extinction Risk: Least Concern



Za *Zostera asiatica*

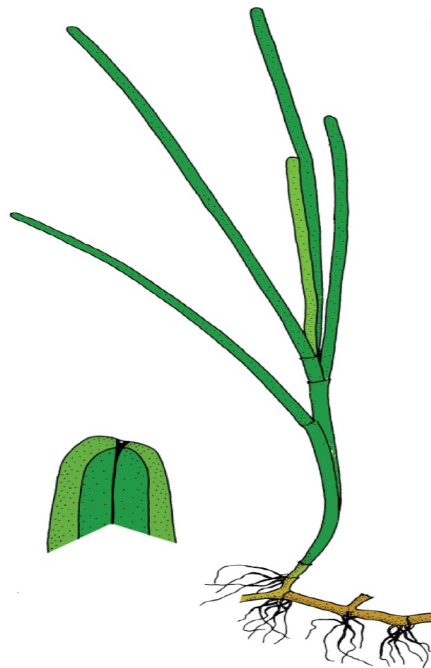
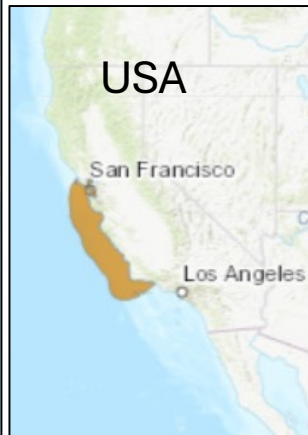
Bioregion
4



Key

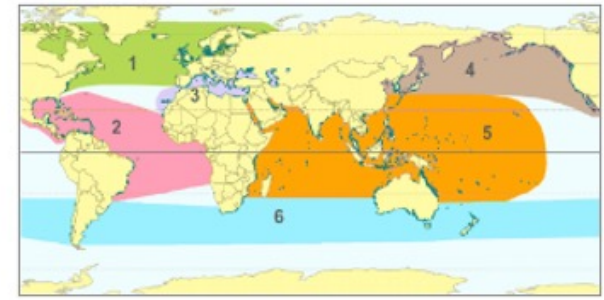
- Flat leaves to 150 cm
- Flattened notched tip
- Thick rhizome
- Seeds 3-5mm brown and smooth
- Monoecious

Extinction Risk: Near Threatened



Zs *Zostera caespitosa*

Bioregion
4



Key

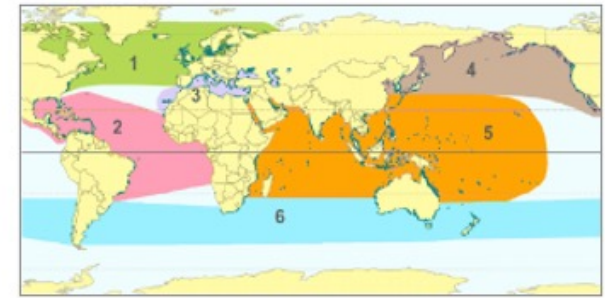
- Flat leaves to 70 cm with rounded notched tip
- Flowering shoot to 60 cm with many branches
- Rhizome robust with short internodes
- Persistent sheath giving a tufted appearance
- Monoecious

Extinction Risk: **Vulnerable**



ZI *Zostera caulescens*

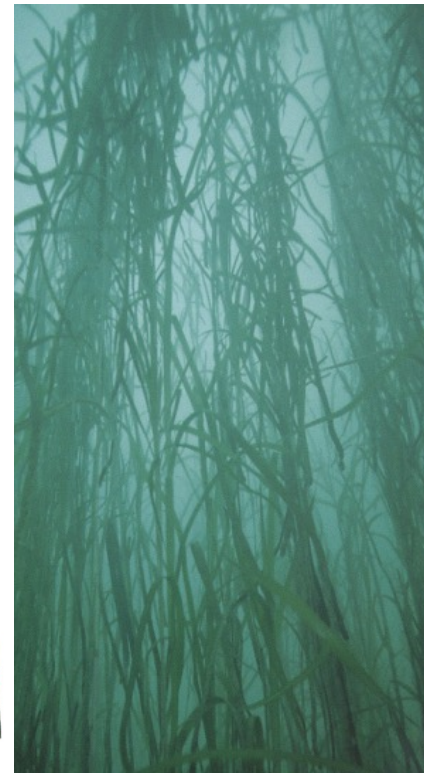
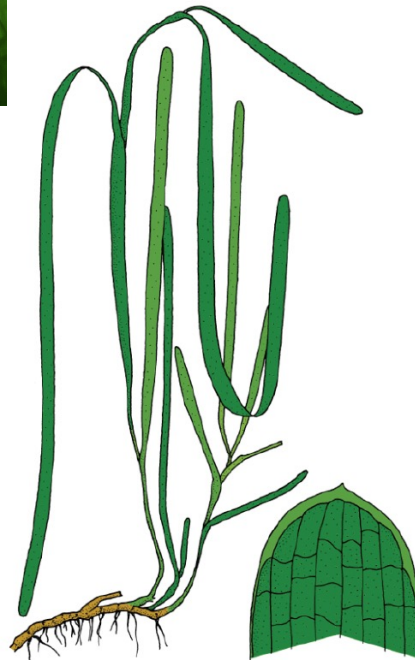
Bioregion
4



Key

- Flat leaves 10-100cm with a short sharp tip
- Flowering shoot to 7m with many branches
- Leaf tip smoothly rounded with central point
- Rhizome robust with terminal shoots
- Monoecious

Extinction Risk: Near Threatened



Zf *Zostera pacifica*



Key

- Flat leaves to 3 m with closed sheath
- Leaf tip smoothly rounded
- Rhizome robust with terminal shoots
- 2 bundles of roots per node
- Monoecious
- Confused with Za and Zm in N America

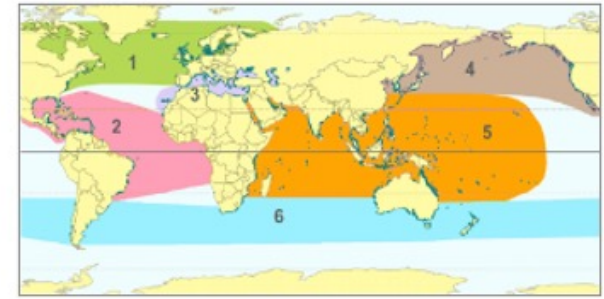


Extinction Risk: **Vulnerable**

Pi *Phyllospadix iwatensis*

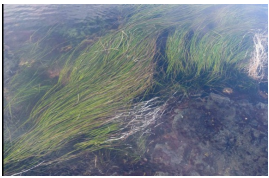
Attached to rocks

Bioregion
4



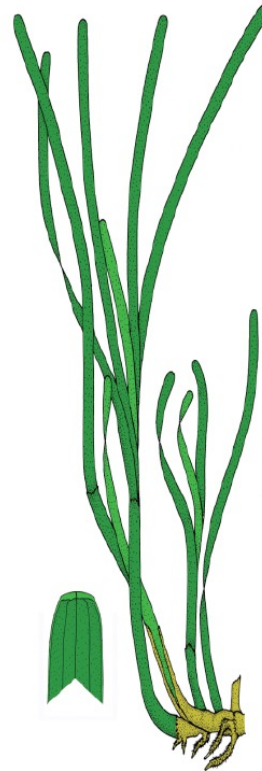
Key

- Flat leaves to 150cm with rounded tip
- Yellowish/brown rhizome
- 5 leaf veins
- Dioecious



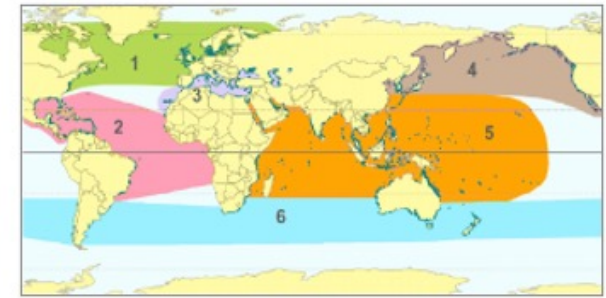
www.inaturalist.org/taxa

Extinction Risk: **Vulnerable**

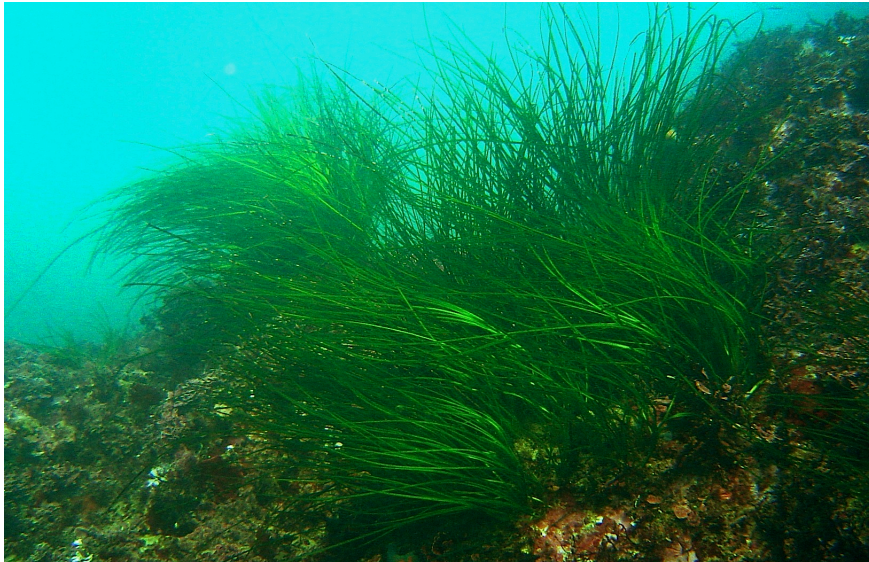


Pj *Phyllospadix japonicus*

Bioregion
4



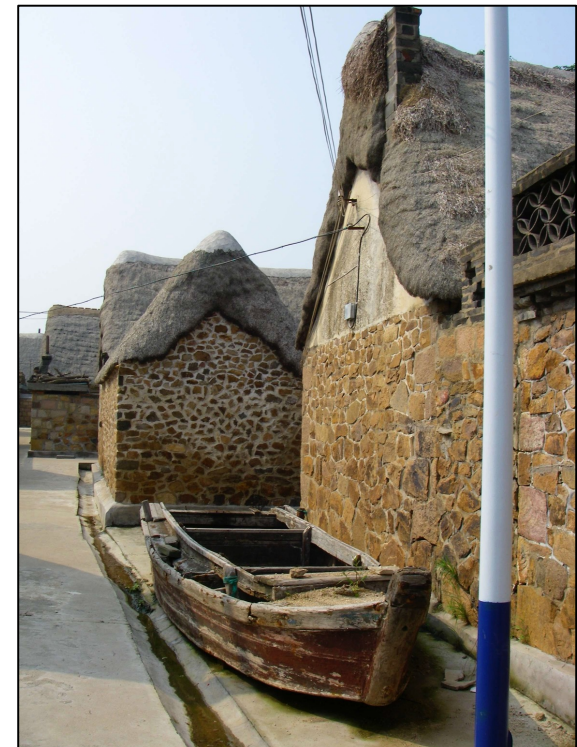
Attached to rocks



Key

- Flat leaves to 100cm with rounded tip
- Black rhizome internode fibers
- 3 leaf veins
- Dioecious

Extinction Risk: **Endangered**

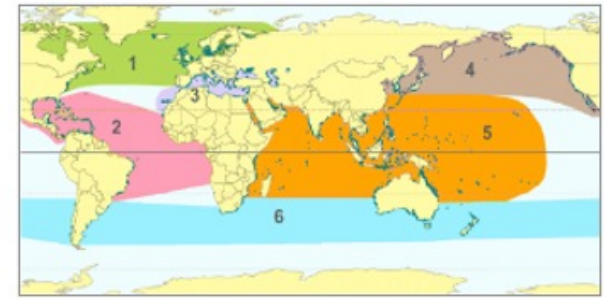


Roofs in Chinese village

Hw *Halodule wrightii*



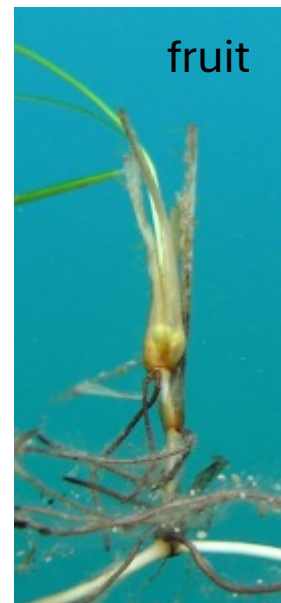
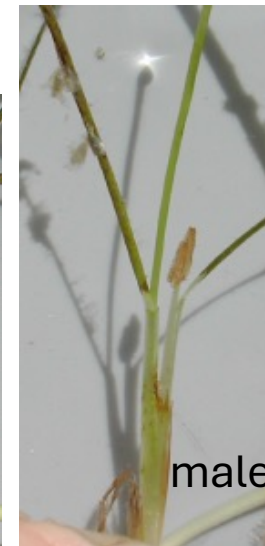
Extinction Risk: Least Concern



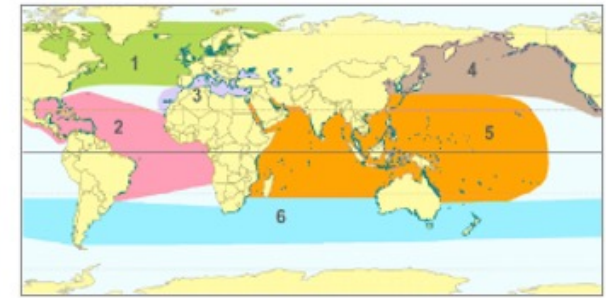
Key

- Leaves flat and thin
- Leaf tip usually 2 points
- Leaves 2-22 cm long
- Rhizome whitish
- Dioecious
- Depth -1 to 20 m
- Sometimes leaves appear red or black

Flowering Parts



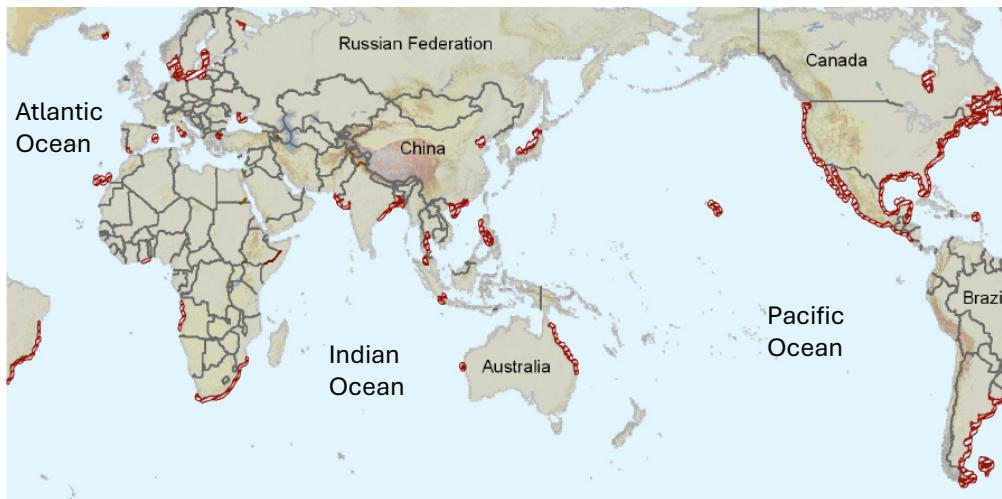
Rm *Ruppia maritima*



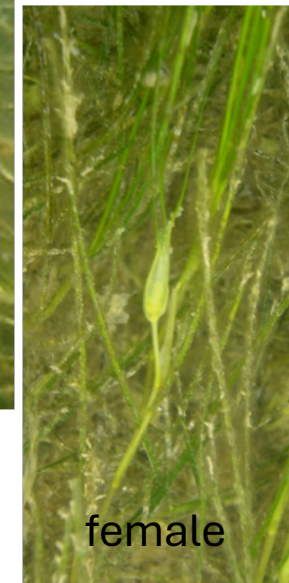
Key

- Leaves flat and thin
- Leaf tapers to tip
- Leaves 4-22 cm long
- Depth -1 to 20 m

Extinction Risk: Least Concern



male



female

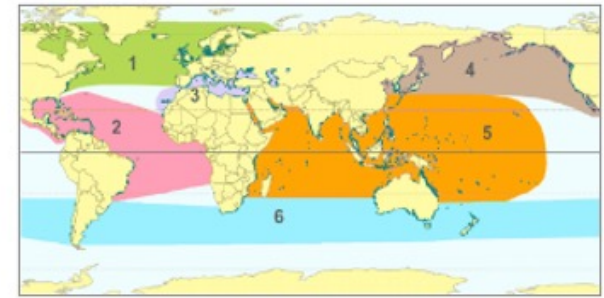
Flowering Parts



fruit

Hd *Halophila decipiens*

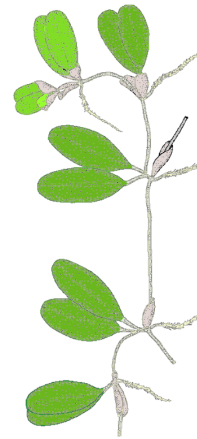
Bioregion
4



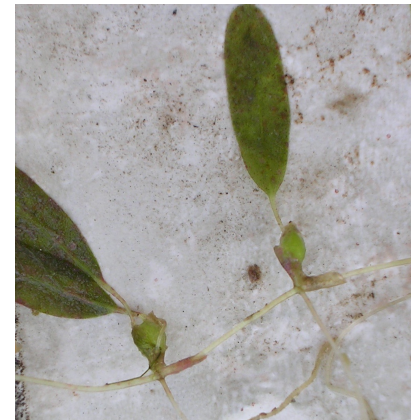
Key

- Paddle-shaped leaf
- Leaf hairs on both side
- Leaf margins serrated
- Leaves 1-4 cm long
- Monoecious
- Depth 0-30 m

Flowering Parts



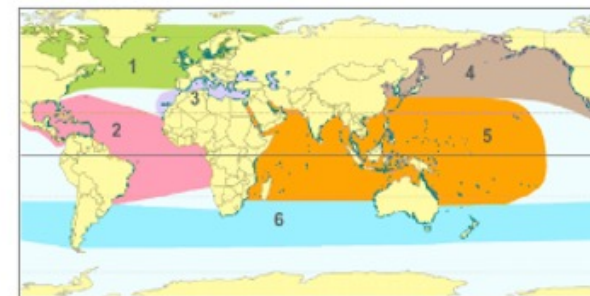
male & female



fruit

Extinction Risk: Least Concern

Hk *Halophila nipponica*



Key

- Paddle-shaped leaves, no hairs
- Leaf margins smooth
- Leaves 1-5cm long
- Depth 0-30 m

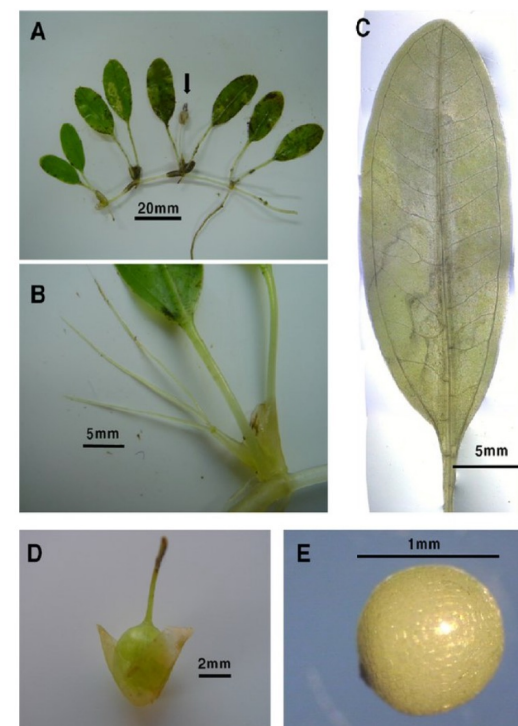
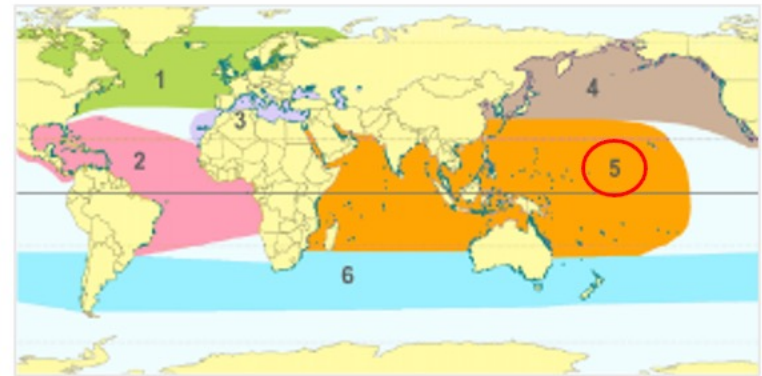


Fig. 2. Morphology of *Halophila nipponica* off the southern coast of Korea. (A) Male flower (arrow) with three purple stamens. (B) Female flower with ovoid ovary and three styles. (C) Leaf blade with 12 pairs of cross-veins. (D) An ovoid fruit. (E) Seed. (For interpretation of the references to color in this figure legend, the reader is referred to the web version of the article.)

Extinction Risk: Data Deficient

From Jeong Bae Kim et al 2009



Seagrass Bioregional Species Key:

5 Tropical Indo-Pacific Bioregion

Species identification key including photo guide, global range maps, drawings, and flowers.

From:

SeagrassNet

Fred Short
University of New Hampshire
603-659-3313 cell
fredtshort@gmail.com
www.SeagrassNet.org

With ratings from:

IUCN Red List of Threatened Species

Seagrass Red List

*Bioregional Guide to the Seagrass Species of the World. 2025. F.T. Short.
Available on-line www.SeagrassNet.org.*

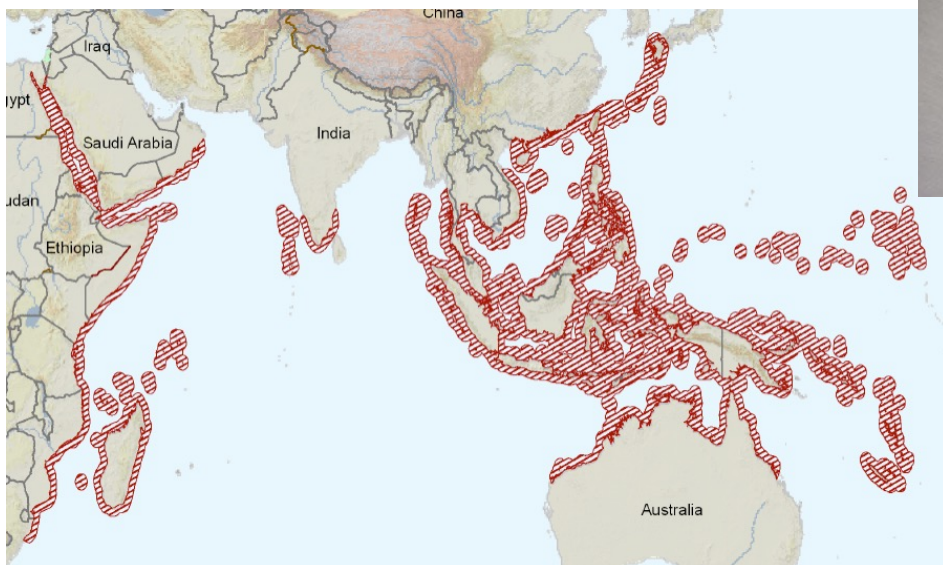
Th *Thalassia hemprichii*



Key

- Rounded serrated leaf tip
- Leaves 10-40 cm, often sickle-shaped
- Rhizome with scale leaves between shoots
- Dioecious
- Sometimes dark tannin spots on leaves
- Sometimes with red leaves in shallows

Extinction Risk: Least Concern



Flowering Parts



fruit

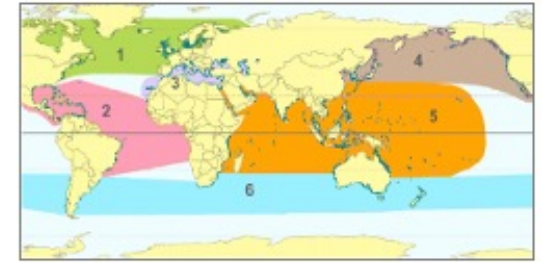


male



Si *Syringodium isoetifolium*

Bioregion
5

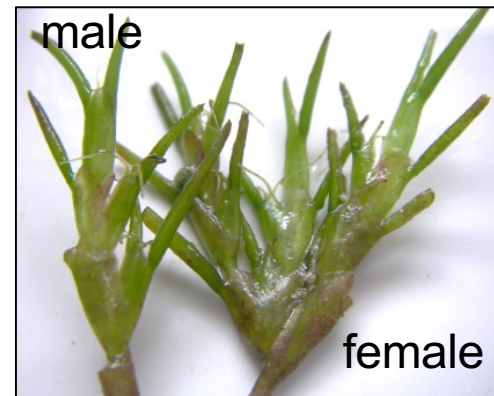


Key

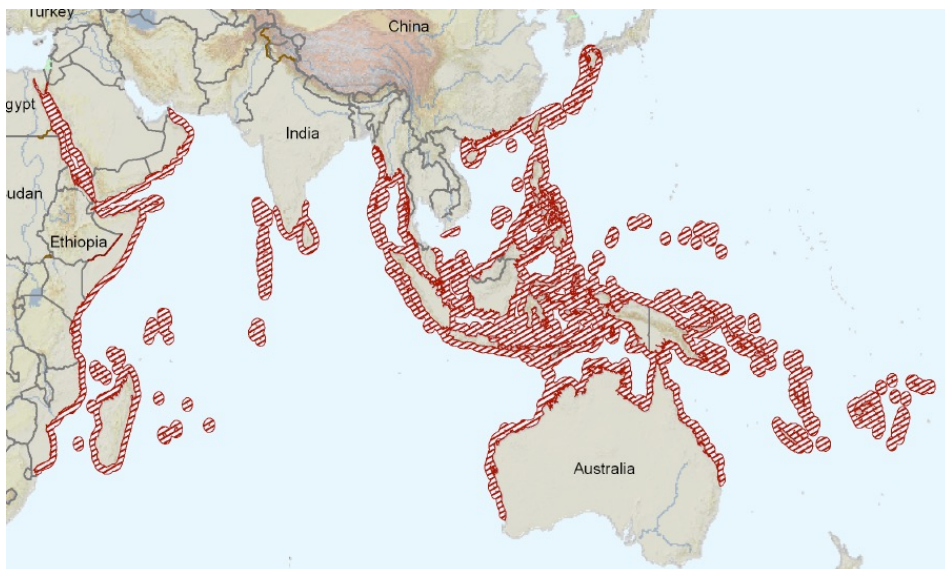
- Leaves cylindrical
- Leaf tips taper
- Leaves 7-30 cm long
- Dioecious

Extinction Risk: Least Concern

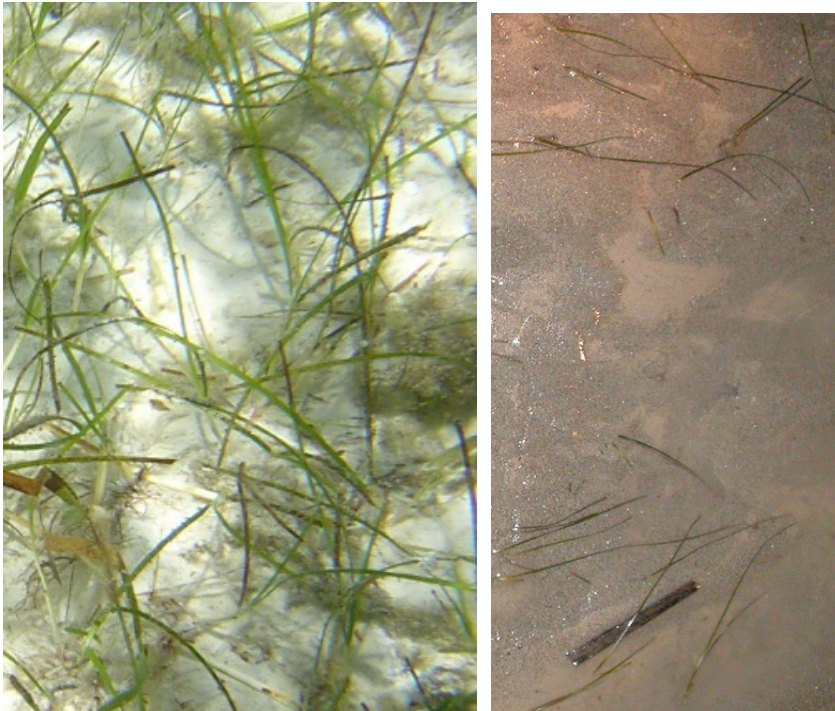
Flowering Parts



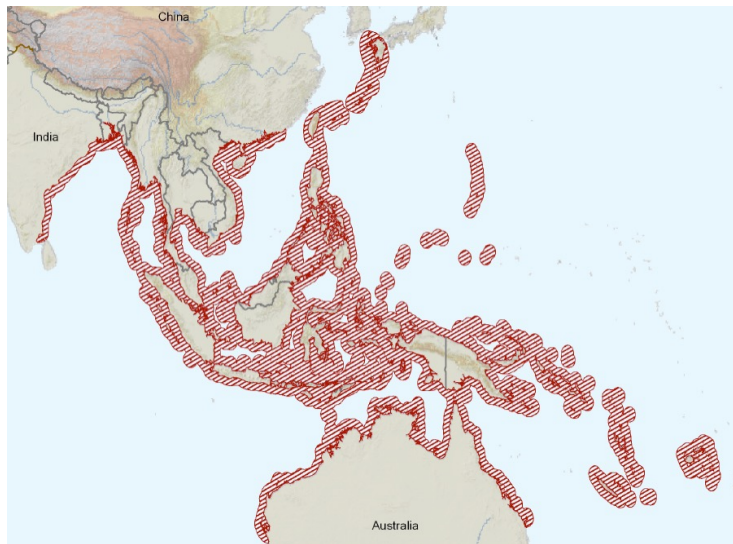
fruit



Hp *Halodule pinifolia*



Extinction Risk: Least Concern



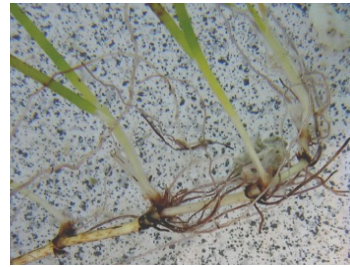
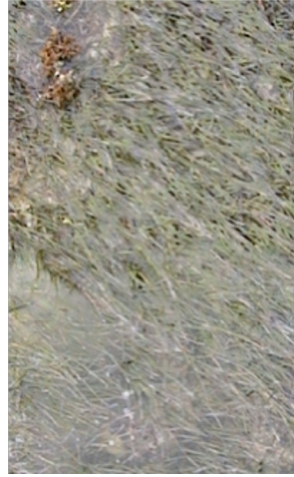
Key

- Rounded leaf tips with marginal points
- One central leaf vein
- Pale rhizome with clean black leaf scars
- Leaves 10 – 30 cm long
- Depth intertidal to 20 m
- Dioecious

Flowering Parts



Hu *Halodule uninervis*



Key

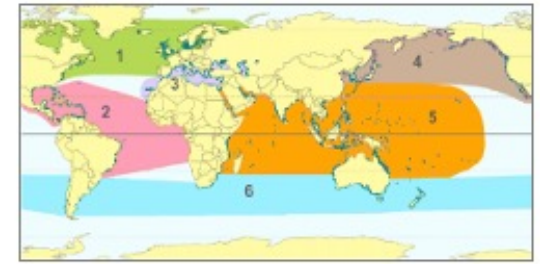
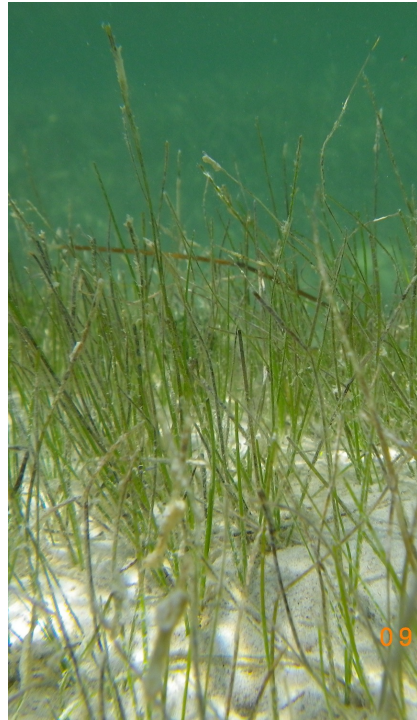
- Leaves flat
- Leaf tip with 3 points
- Rhizome whitish with black leaf scars
- Leaves 10 – 30 cm long
- Depth intertidal to 20 m
- Dioecious

Flowering Parts

Extinction Risk: Least Concern



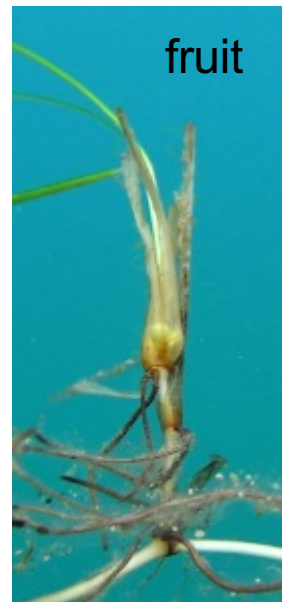
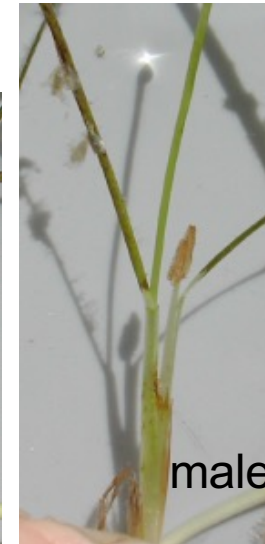
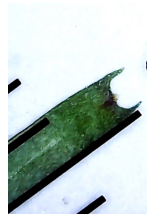
Hw *Halodule wrightii*



Key

- Leaves flat and thin
- Leaf tip usually 2 points
- Leaves 2-22 cm long
- Rhizome whitish
- Dioecious
- Depth -1 to 20 m
- Sometimes leaves red or black

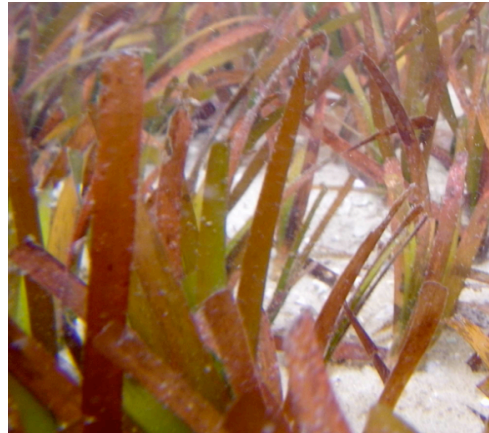
Flowering Parts



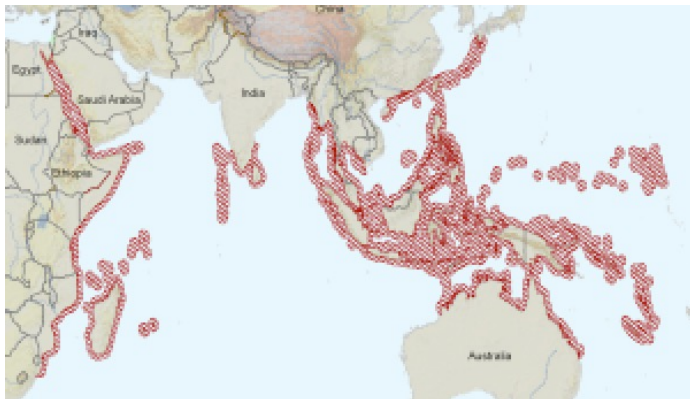
Extinction Risk: Least Concern



Cr *Cymodocea rotundata*



Extinction Risk: Least Concern



Key

- Smooth rounded-to-squared leaf tip
- Leaf scar fully encircles vertical stem
- Narrow leaf blades (2-5 mm)
- Leaves 7-20 cm long with 9-15 veins
- Dioecious
- Often with red leaves

Flowering Parts



male



female



fruit

Cs *Cymodocea serrulata*

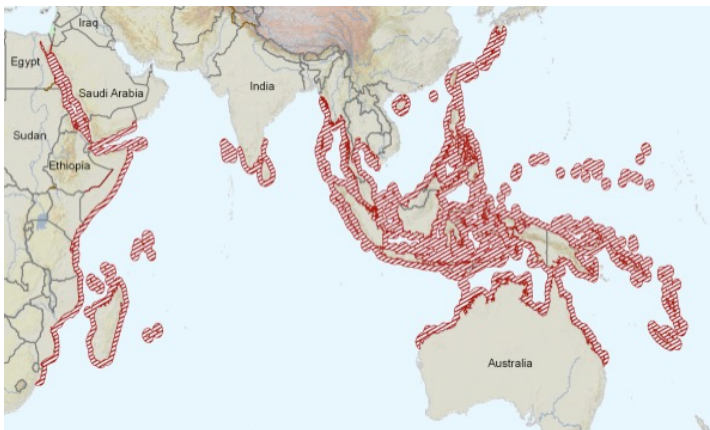


Key

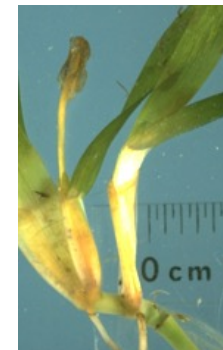
- Serrated rounded leaf tip
- Leaf scar not encircling vertical stem
- Wide leaf blades (4-12 mm)
- Leaves 6-15 cm with 13-17 veins
- Triangle shaped sheath
- Dioecious
- Often with red cross-stripes on leaves



Extinction Risk: Least Concern



Flowering Parts



male



female



Seed

Tc *Thalassodendron ciliatum*

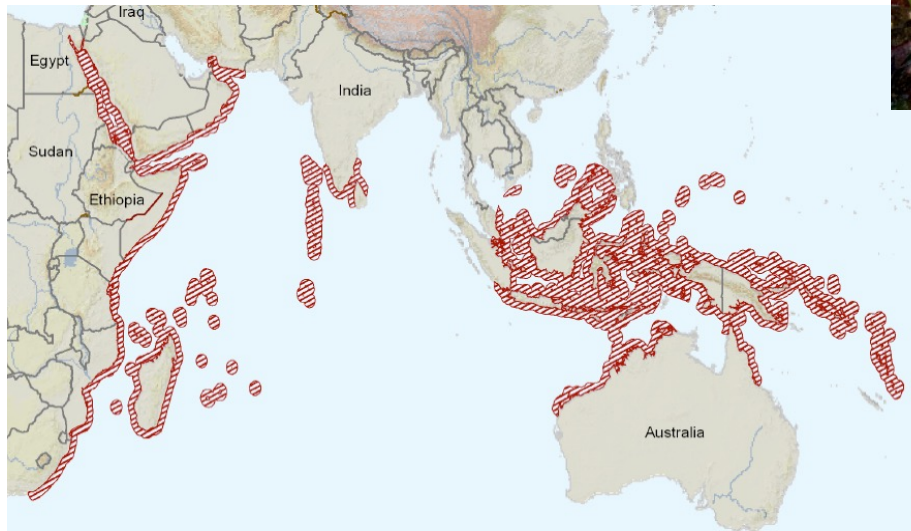


Key

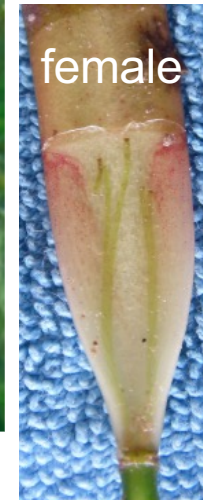
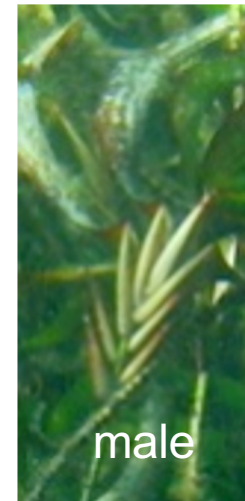
- Cluster of leaves on an erect stem
- Leaves 10-20 cm
- Sickle-shaped leaves with serrated tips
- Rhizome woody
- Dioecious
- Leaves often have red cross-stripes



Extinction Risk: Least Concern



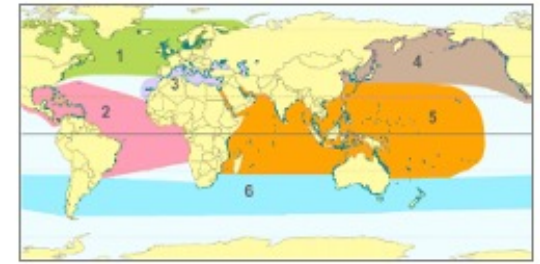
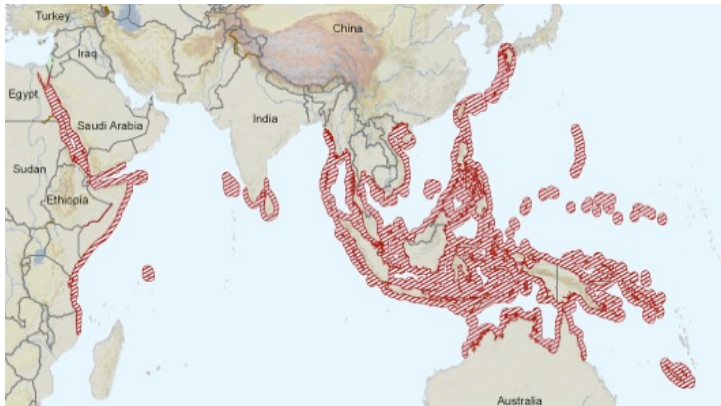
Flowering Parts



Ea *Enhalus acoroides*



Extinction Risk: Least Concern



Key

- Smooth rounded leaf tip
- Leaves 30 cm - 2m long
- Leaf edge rolls around tough fiber
- Wide leaf blades (10-20 mm)
- Rhizome with long black bristles
- Depth intertidal to 2 m
- Dioecious

Flowering Parts



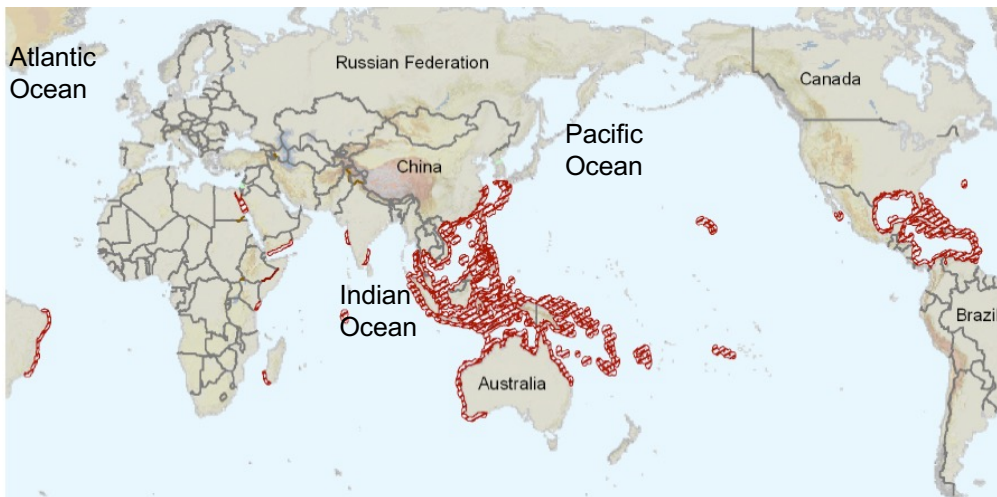
Hd *Halophila decipiens*



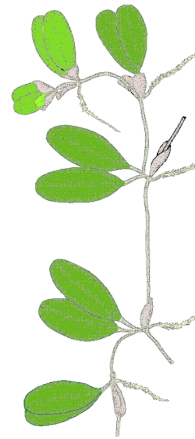
Key

- Paddle-shaped leaves
- Leaf hairs on both sides
- Leaf margins serrated
- Leaves 1-4 cm long
- Monoecious
- Depth 0-30 m

Extinction Risk: Least Concern



Flowering Parts

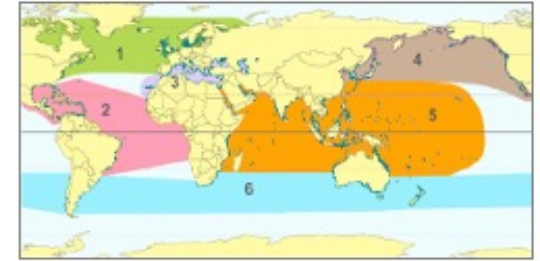
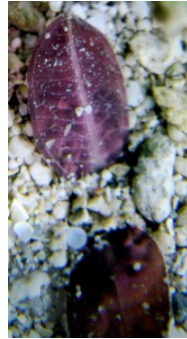


male & female



fruit

Ho *Halophila ovalis*



Key

- Oval-shaped leaves
- Leaves 1-4 cm long
- No leaf hairs
- Leaf margins smooth
- Depth 0-10 m
- Dioecious



Flowering Parts

female

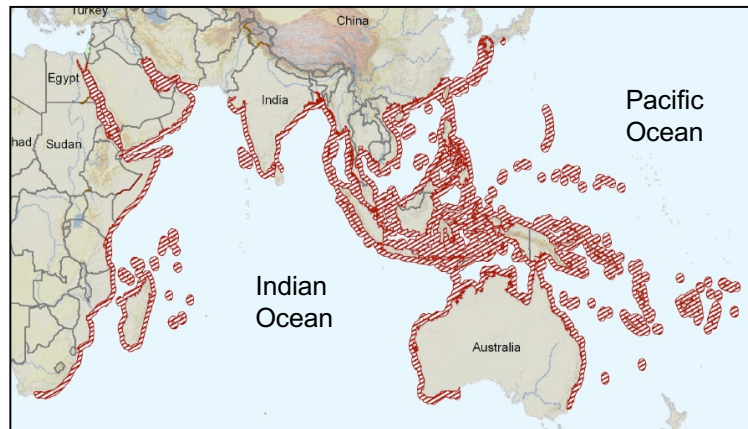


male



Extinction Risk: Least Concern

Atlantic Ocean



Hm *Halophila minor*



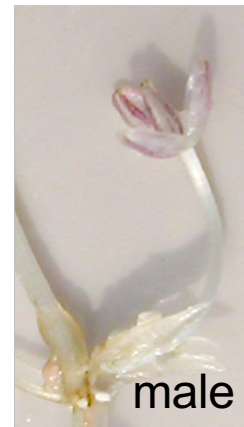
Extinction Risk: Least Concern



Key

- Small oval leaves
- 4 - 8 cross veins
- Leaves 8 to 13 mm long
- No hairs on leaf surface
- Often intertidal
- Dioecious

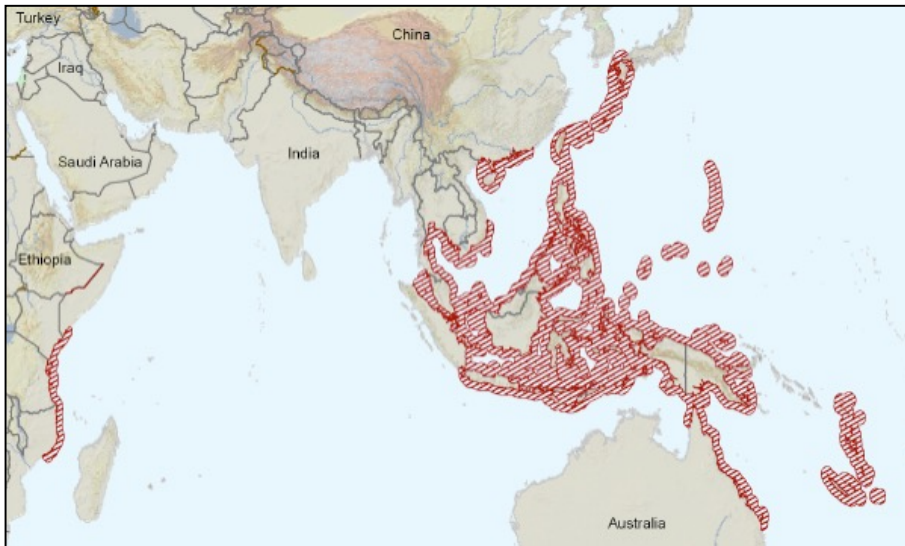
Flowering Parts



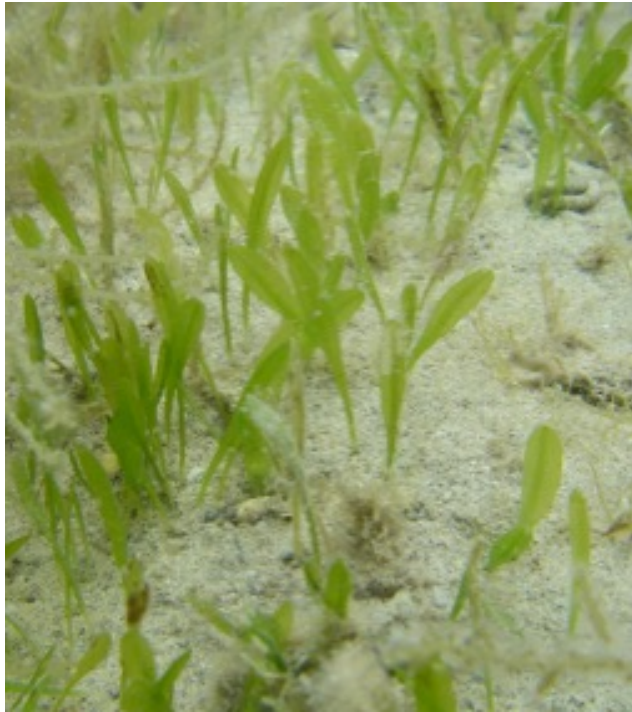
male



female



Ho *Halophila hawaiiiana*



Extinction Risk: **Vulnerable**



Key

- Leaves 1-4 cm long
- No leaf hairs
- Leaf margins smooth
- Dioecious
- Depth 0 -10 m

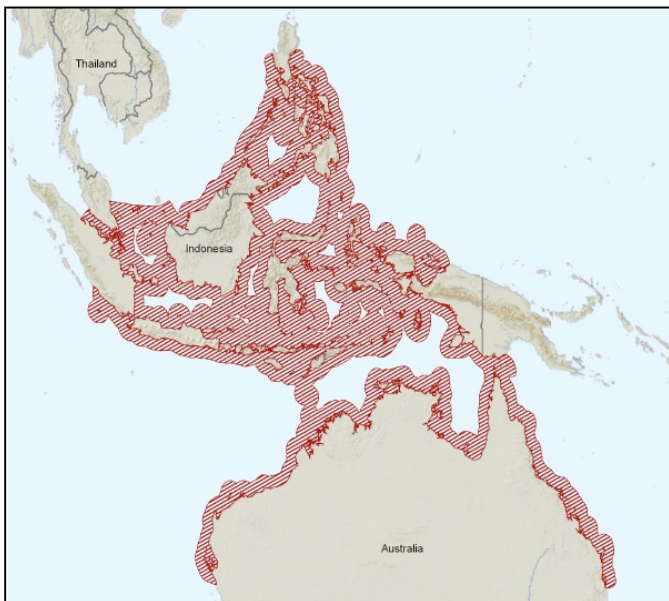
Flowering Parts



Hn *Halophila spinulosa*



Extinction Risk: Least Concern



Key

- Many oval-shaped leaves on a single stem
- Leaf edges finely serrated
- Wiry rhizome with stems to 30 cm
- Depth 0 -10 m
- Male and female different stems same plant

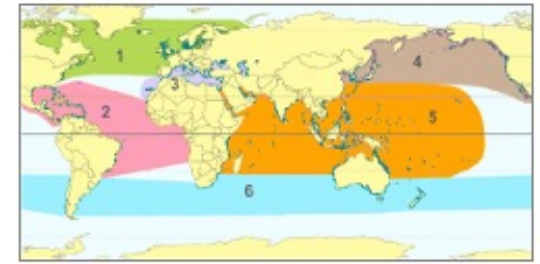
Flowering Parts

female



male

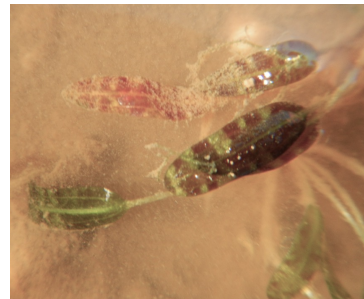
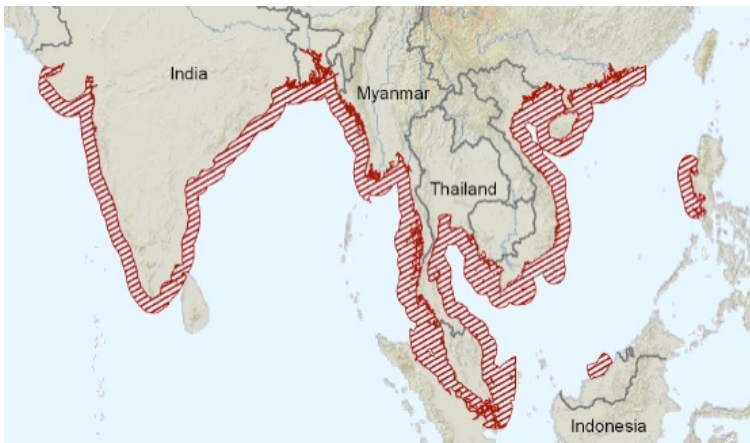
Hb *Halophila beccarii*



Key

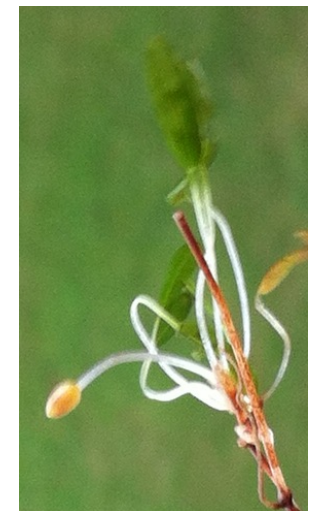
- 5+ elongated oval leaves in clusters
- Leaves 0.5 –2 mm wide
- Leaves up to 13 mm long
- Often intertidal
- Dioecious

Extinction Risk: **Vulnerable**



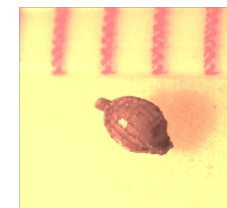
Flowering Parts

female



male

seed



Ht

Halophila tricostata

Bioregion
5

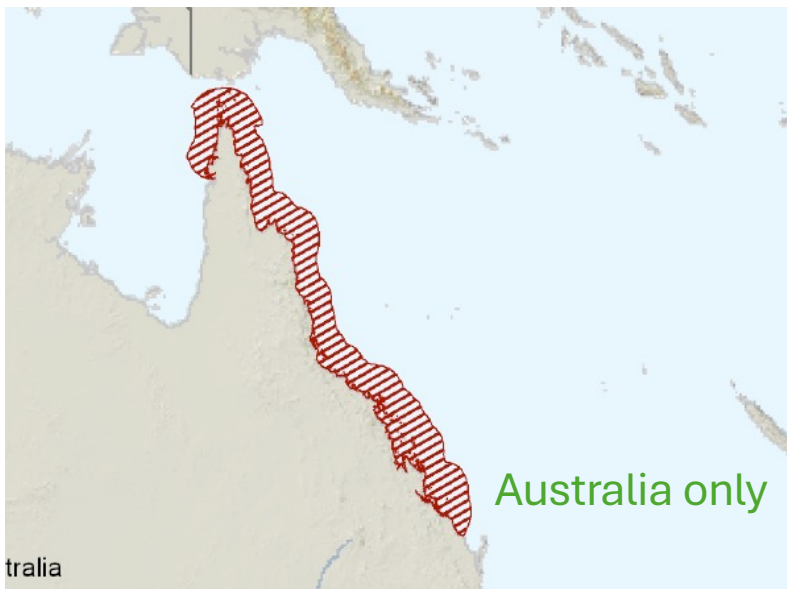


Halophila tricostata

Key

- Clusters of 3 leaves on vertical stem
- Leaf with mid-vein and no cross veins
- Leaf margins finely serrated
- Dioecious
- Depth 0-30 m

Extinction Risk: Least Concern

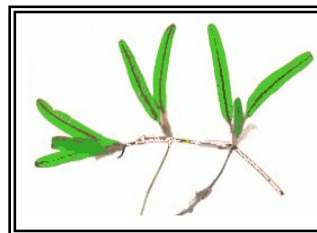


Hs *Halophila stipulacea*



- Elongated paddle-shaped leaves to 6cm
- Leaf stippled and bullate, tip serrated
- Distinctive scales cover the stem
- Depth 0-60m
- Dioecious
- Range expanding

Extinction Risk: Least Concern



Flowering Parts



male



female

Zj *Nanozostera japonica*



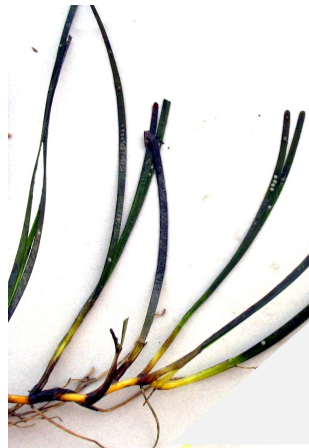
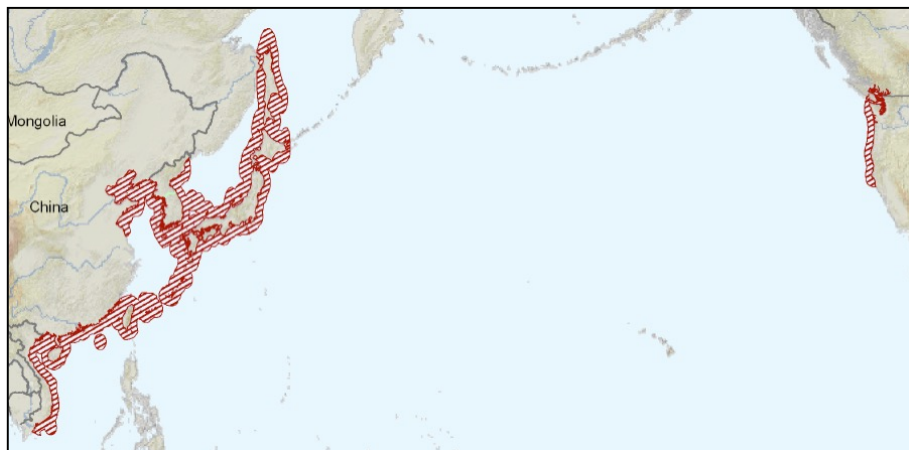
Key

- Smooth rounded leaf tip
- Narrow leaf blades (2-5 mm)
- Leaves 7-20 cm long
- Monoecious
- Depth intertidal - shallow subtidal

Flowering Parts



Extinction Risk: Least Concern



Zc *Nanozostera muelleri*

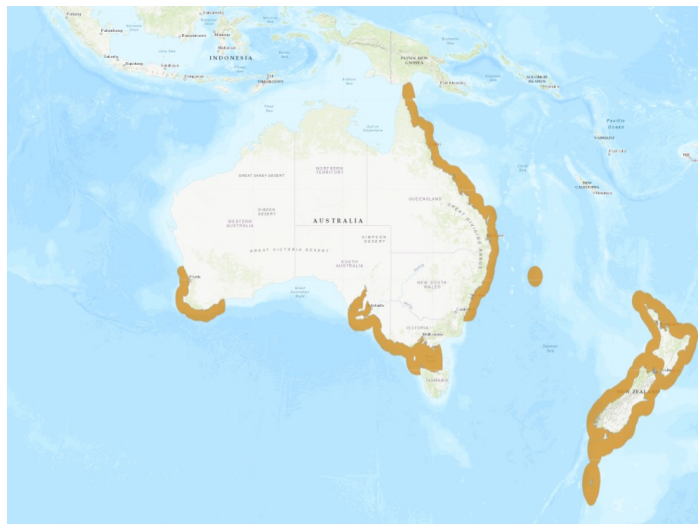


Shaun Lee 2024



Tony Strazzari

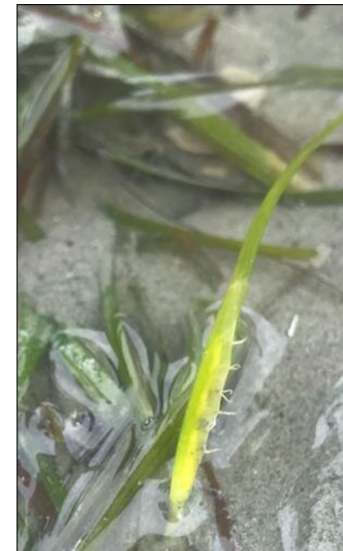
Extinction Risk: Least Concern



Key

- Round leaf tip deeply notched
- Strap-like leaf blades (1-3 mm wide)
- Leaves 10-60 cm long
- Persistent leaf sheath
- Monoecious
- Previously known as *Zostera capricorni*

Flowering Parts



Rachel Hooks 2024

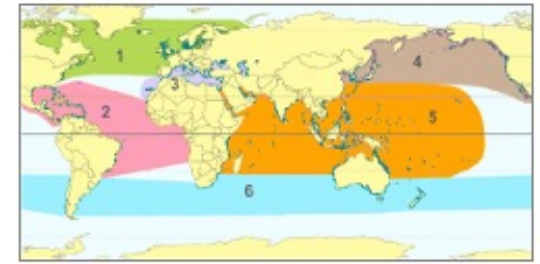


de Kock et al. 2016

female



Zp *Nanozostera capensis*



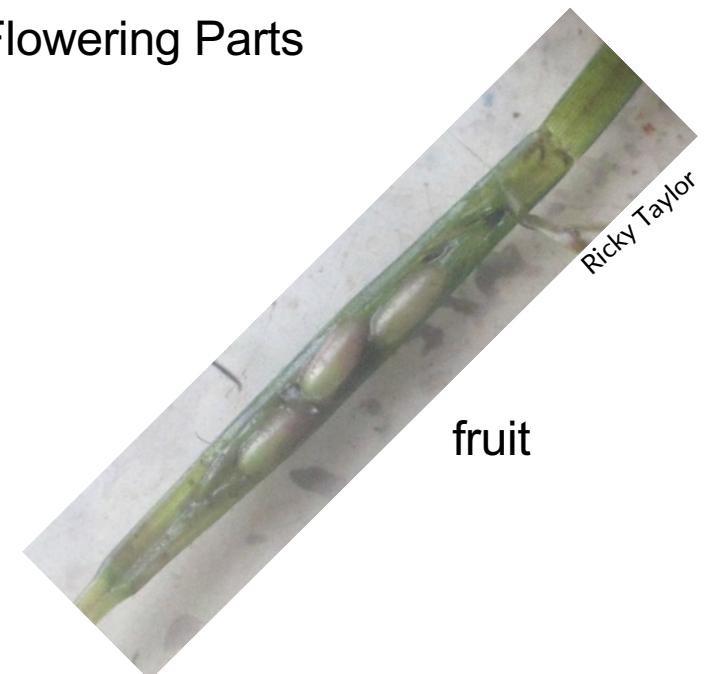
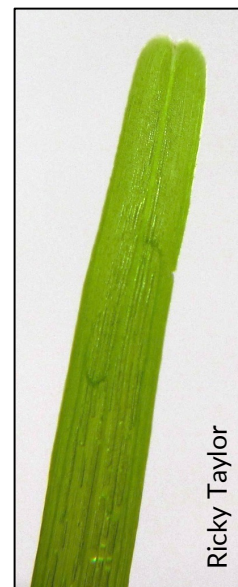
Key

- Round indented leaf tip
- Leaf with staggered cross veins
- Strap-like leaf blades (0.5-2.5 mm)
- Leaves 10-115 cm long
- Persistent leaf sheath
- Monoecious

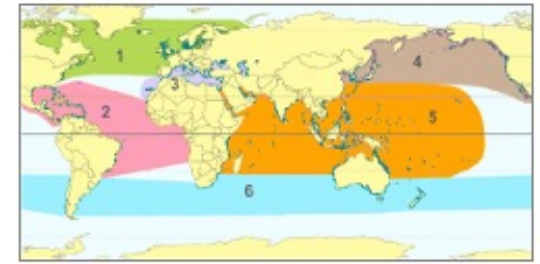
Extinction Risk: Least Concern



Flowering Parts



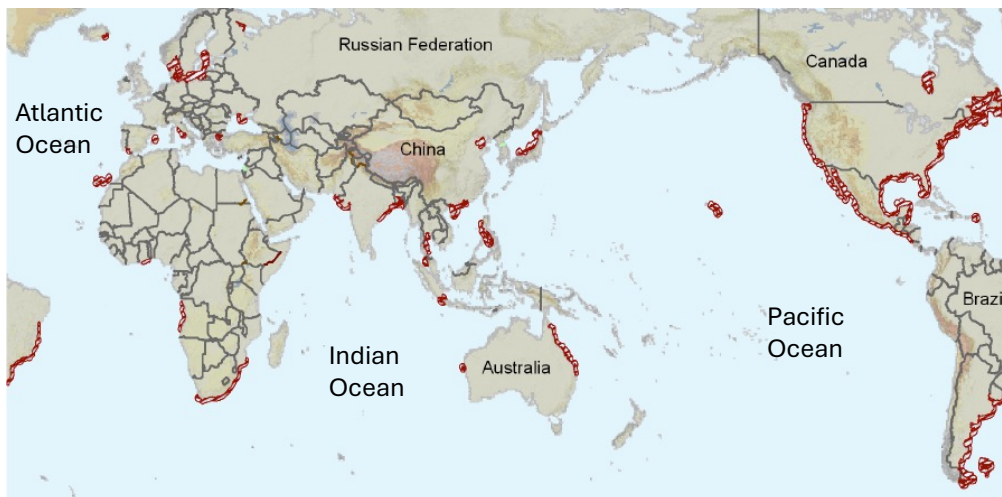
Rm *Ruppia maritima*



Key

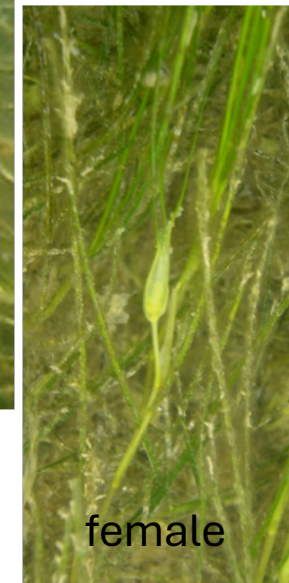
- Leaves flat and thin
- Leaf tapers to tip
- Leaves 4-22 cm long
- Depth -1 to 20 m

Extinction Risk: Least Concern



male

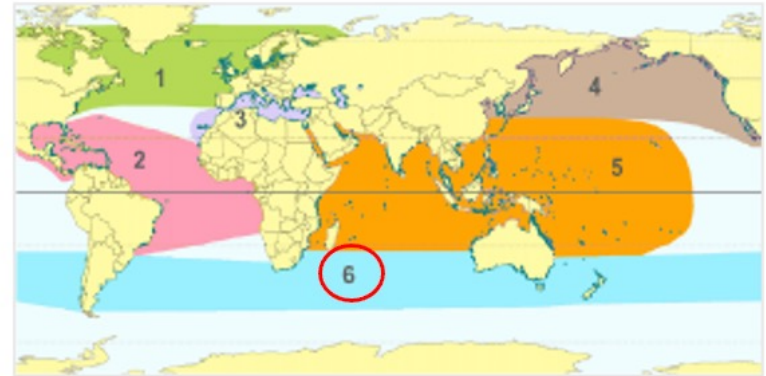
Flowering Parts



female



fruit



Seagrass Bioregional Species Key:

6 Temperate Southern Oceans Bioregion

Species identification key including photo guide, global range maps, drawings, and flowers.

From:

SeagrassNet

Fred Short
University of New Hampshire
603-659-3313 cell
fredtshort@gmail.com
www.SeagrassNet.org

With ratings from:

IUCN Red List of Threatened Species

Seagrass Red List

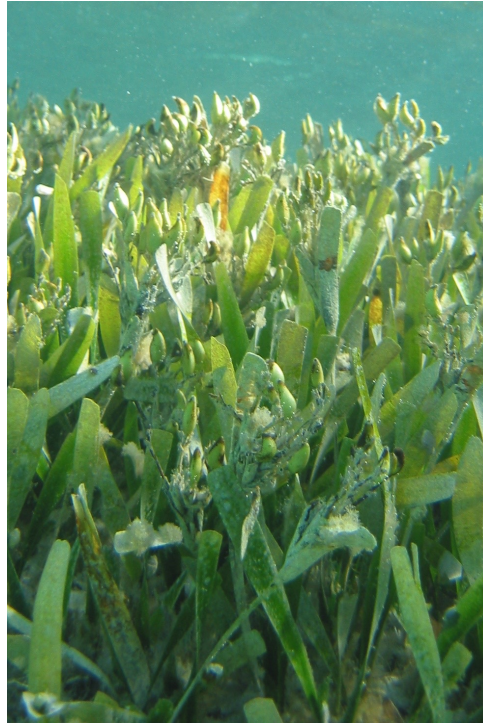
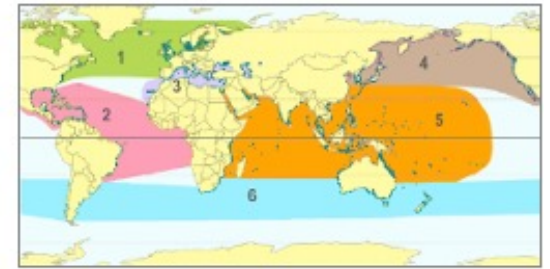
*Bioregional Guide to the Seagrass Species of the World. 2025. F.T. Short.
Available on-line www.SeagrassNet.org.*

Pa

Posidonia australis

Bioregion

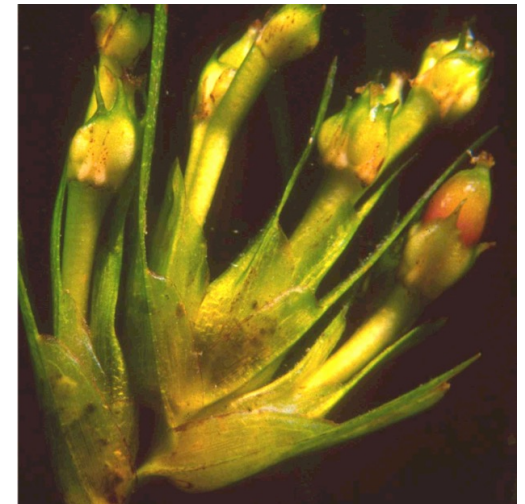
6



Key

- Leaves 40-60 cm
- Leaf tip rounded
- Rhizome robust, brush-like and fibrous
- Flowers emerge on a stem
- Monoecious

Flowering Parts

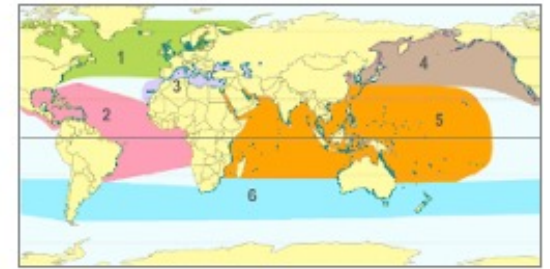


Photos from Gary Kendrick

Extinction Risk: Least Concern



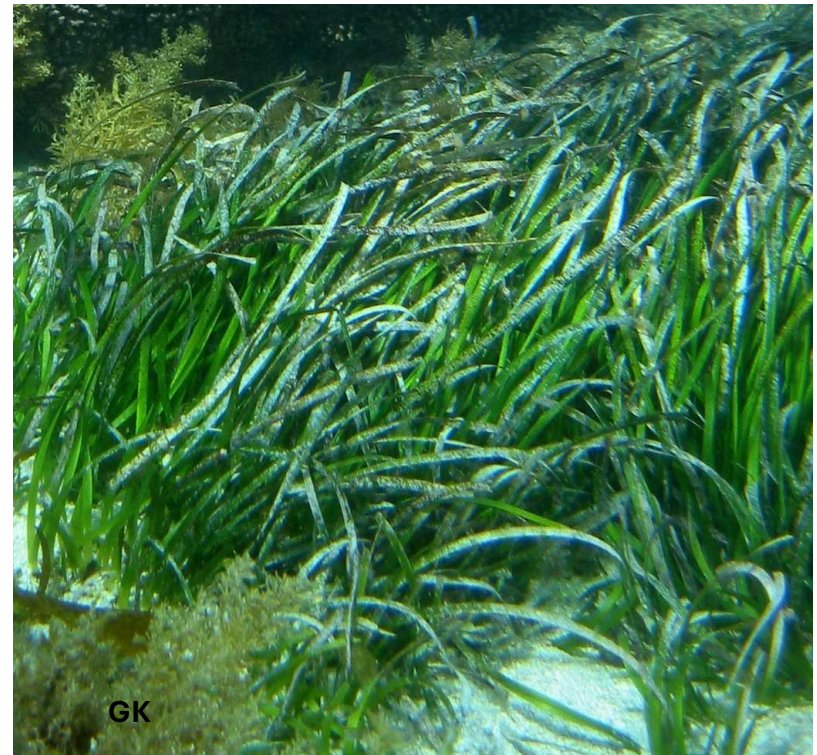
Pn *Posidonia sinuosa*



Key

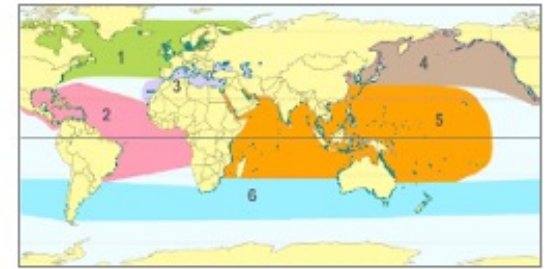
- Leaves ribbon like, 140 cm
- Leaf tip rounded
- Leaf sheath membranous
- Flowers emerge at base
- Monoecious

Extinction Risk: Least Concern



Pg *Posidonia angustifolia*

Bioregion
6



Gary Kendrick

Key

- Leaves ribbon like, 80 cm
- Leaf tip rounded
- Rhizome robust, pale fibers
- Flowers emerge on a stem
- Monoecious

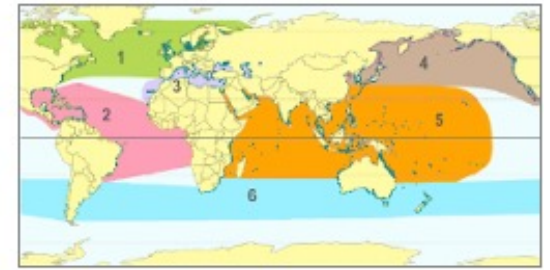
Extinction Risk: Least Concern



Pf

Posidonia ostenfeldii

Bioregion
6



Key

- Leaves thick, round and up to 180 cm
- Leaf tip rounded
- Rhizome enclosed in fine pale fibers
- Flowers emerge on a stem
- Monoecious

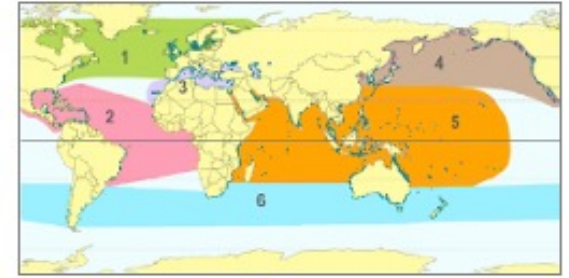
Extinction Risk: Least Concern



Gary Kendrick

Pd *Posidonia denhartogii*

Bioregion
6



Key

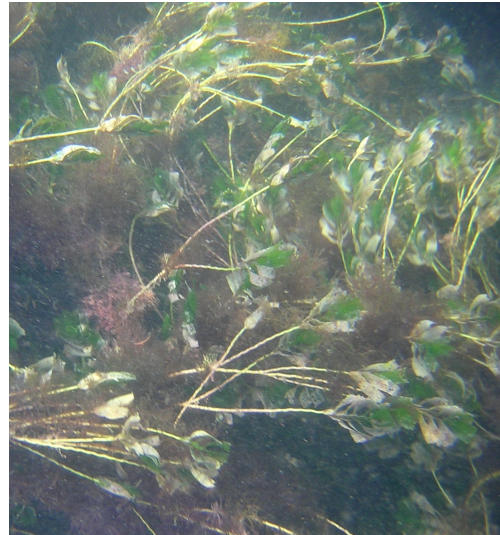
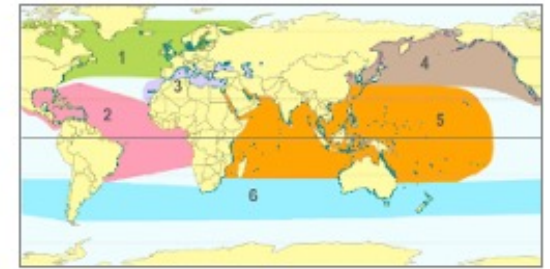
- Leaves biconvex 120 cm
- Leaf tip rounded
- Rhizome robust, pale fibers
- Flowers emerge on a stem
- Monoecious

Extinction Risk: Least Concern



Aa *Amphibolis antarctica*

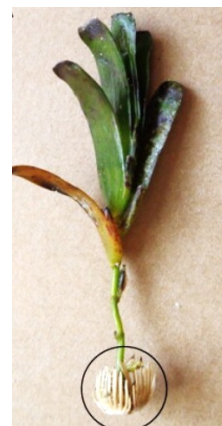
Bioregion
6



Key

- Wiry stems 1.5 m long
- Leaf crowns of 6-10 bidentate blades
- Strap-like leaf blades (5 cm) twisted

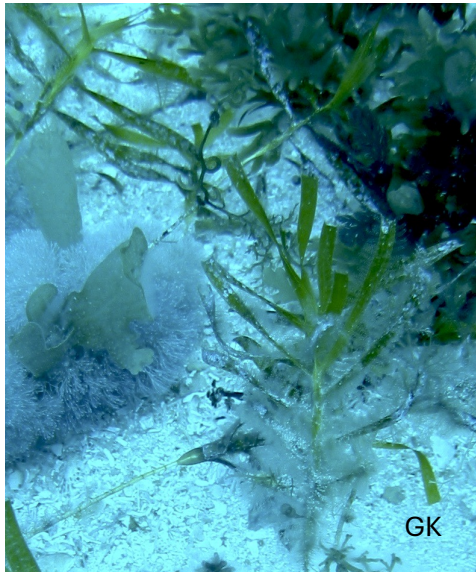
Extinction Risk: Least Concern



seedling



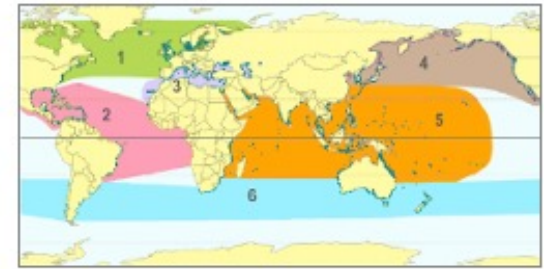
Ag *Amphibolis griffithii*



Extinction Risk: Least Concern

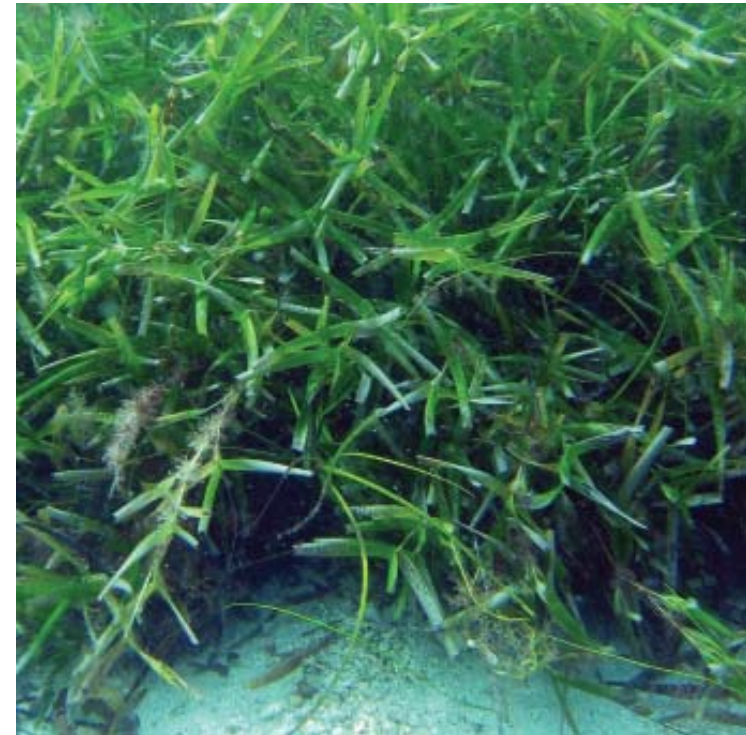


Bioregion
6



Key

- Wiry stems 1.0 m long
- Leaf crowns of 4-5 notched blades
- Strap-like leaf blades (3-10 cm)



ian.umces.edu

Zo *Heterozostera polychlamys*



Key

- Squared leaf tip, shallow notch
- Wiry erect stems, not black
- Strap-like leaf blades (0.5-2.5 mm wide)
- Shoot 100 cm long

Extinction Risk: Least Concern

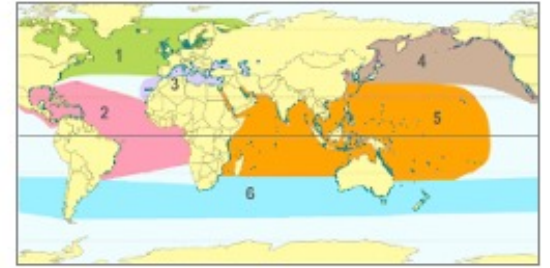
Australia only



Lotte Horn

Z† *Heterozostera tasmanica*

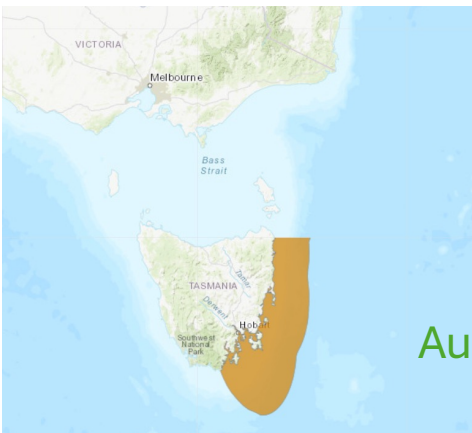
Bioregion
6



Key

- Rounded leaf tip, deeply notched
- Wiry erect stems, not black
- Strap-like leaf blades (35cm long)

Extinction Risk: Data Deficient



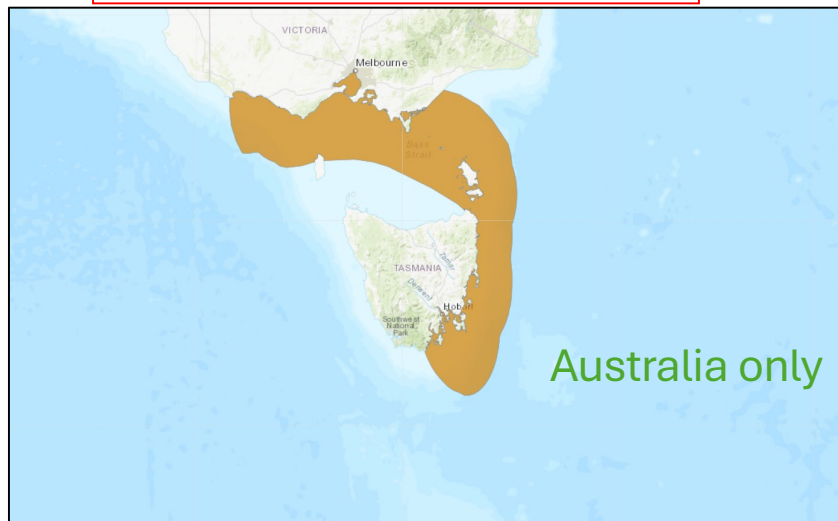
Australia only



Zr *Heterozostera nigricaulis*

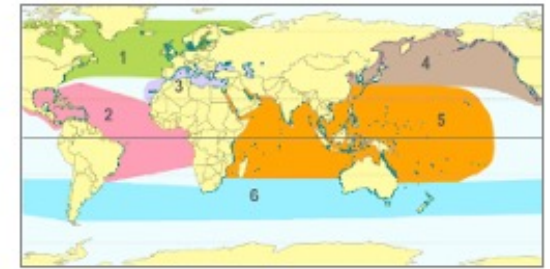


Extinction Risk: Least Concern



Bioregion

6

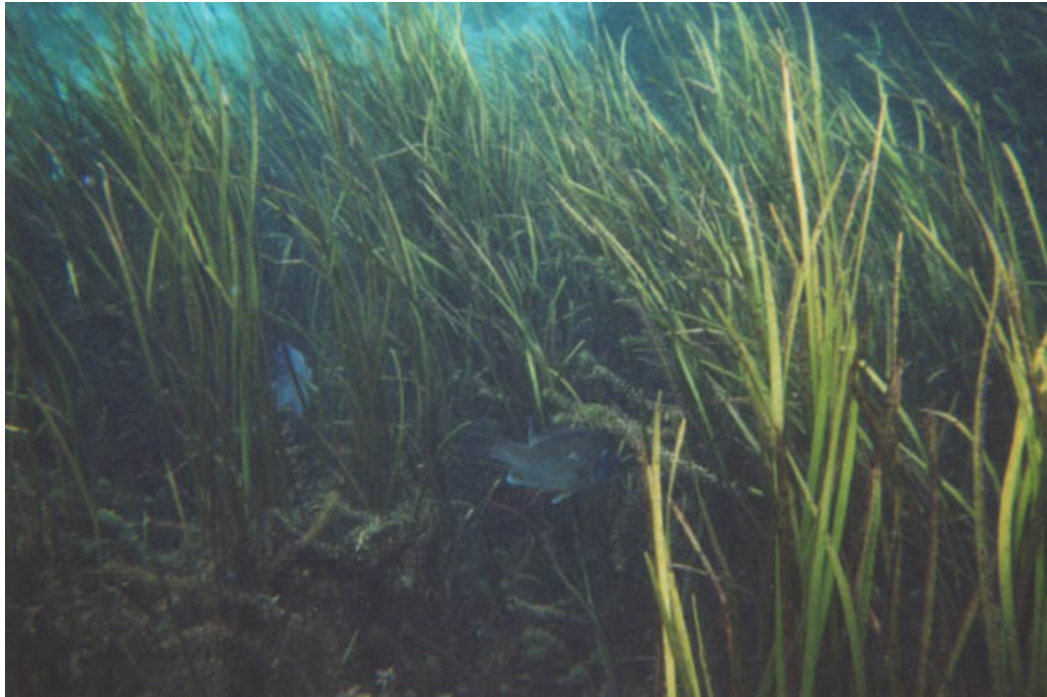
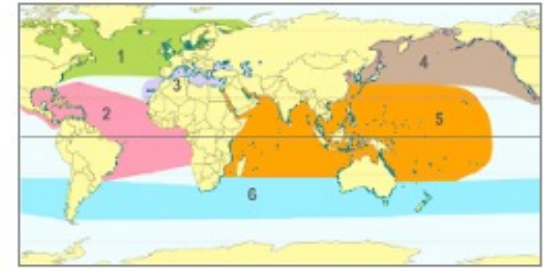


Key

- Squared leaf tip, notched
- Wiry erect stems, black
- Shoot 100 cm long

Zh *Heterozostera chilensis*

Bioregion
6

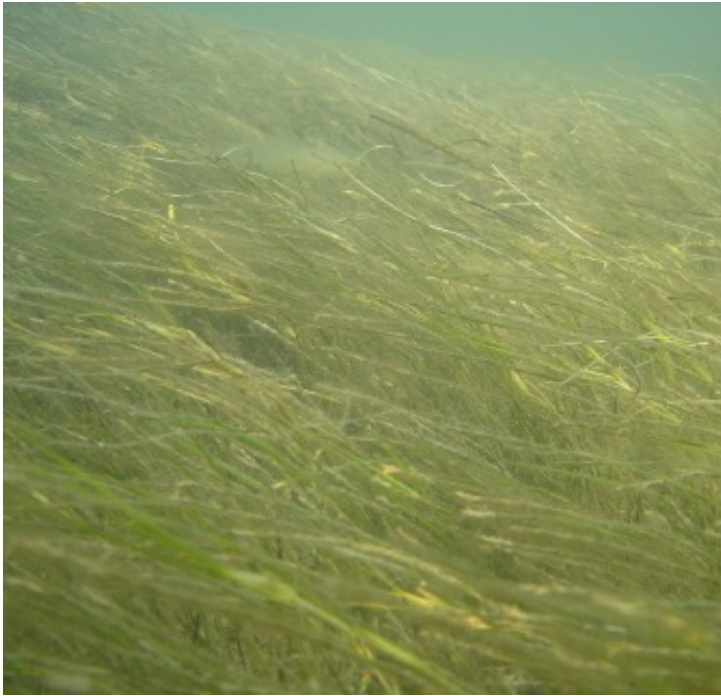


Extinction Risk: **Endangered**

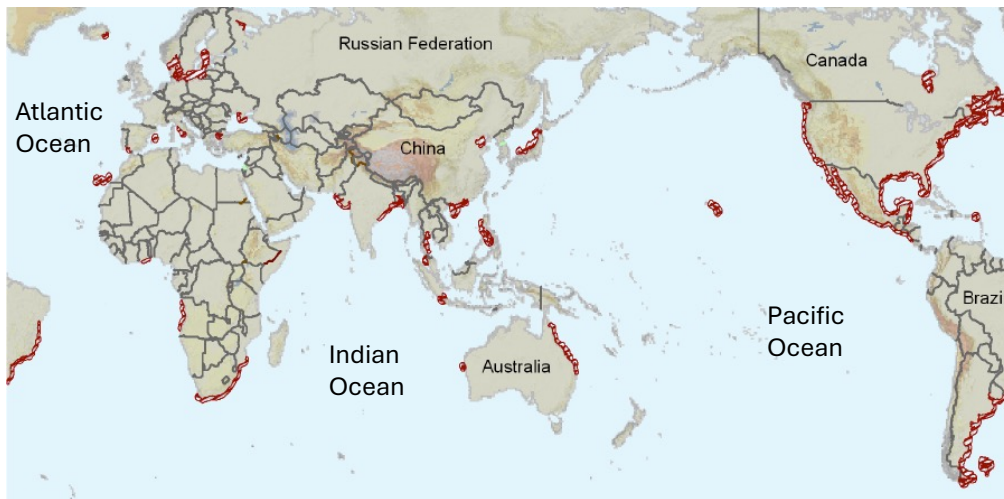
Chile only



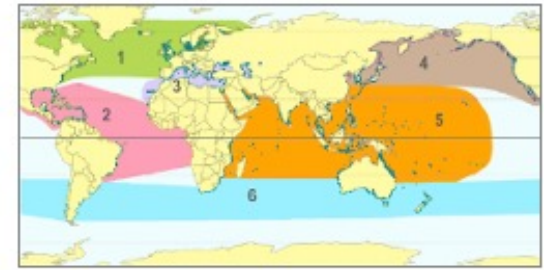
Rm *Ruppia maritima*



Extinction Risk: Least Concern



Bioregion
6



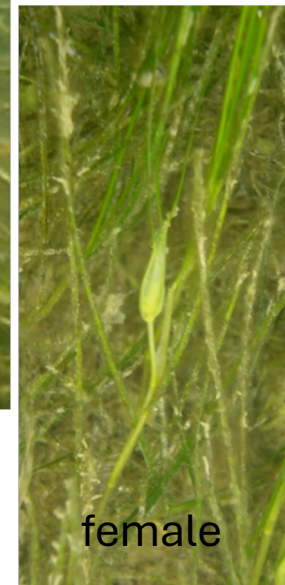
Key

- Leaves flat and thin
- Leaf tapers to tip
- Leaves 4-22 cm long
- Depth -1-20 m

Flowering Parts



male



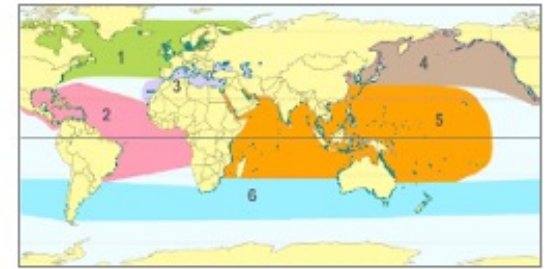
female



fruit

Si *Syringodium isoetifolium*

Bioregion
6

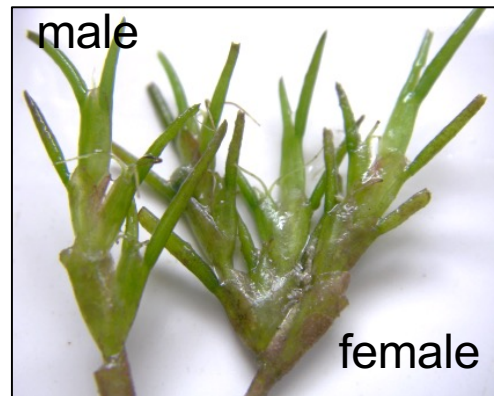


Key

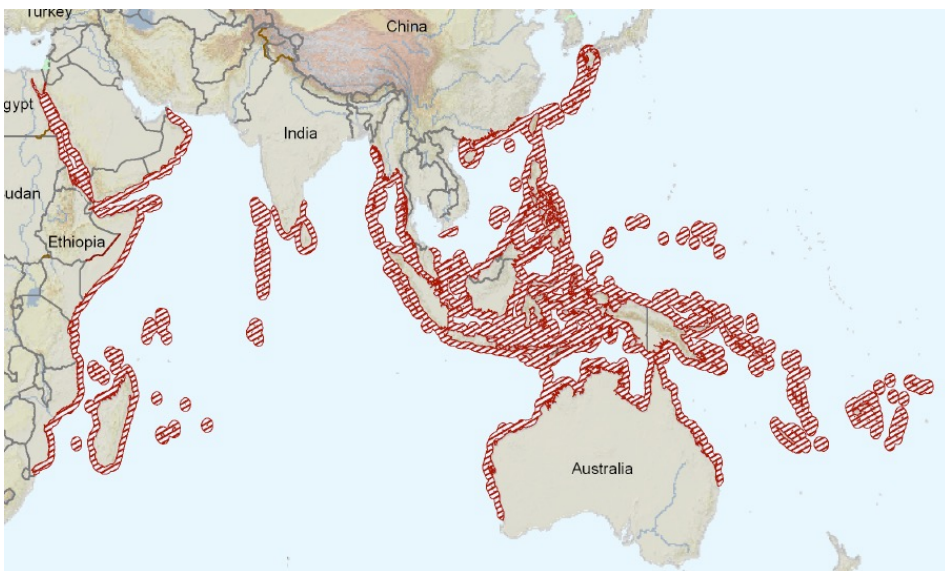
- Leaves cylindrical
- Leaf tips taper
- Leaves 7-30 cm long
- Dioecious

Extinction Risk: Least Concern

Flowering Parts

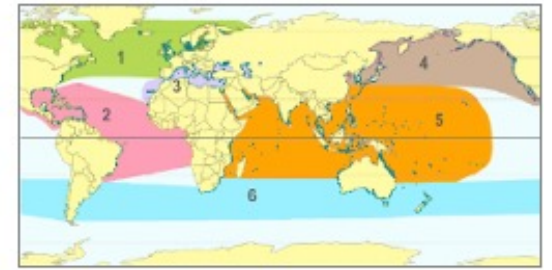


fruit



Tc *Thalassodendron ciliatum*

Bioregion
6



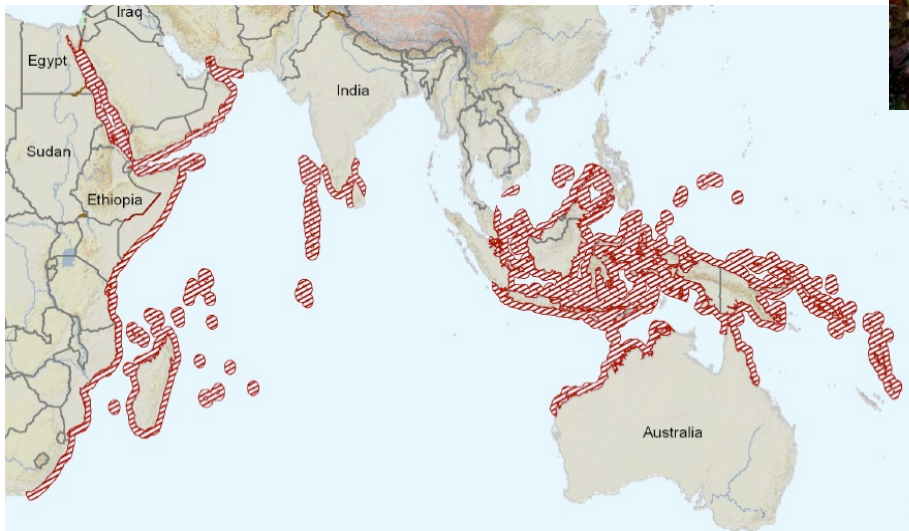
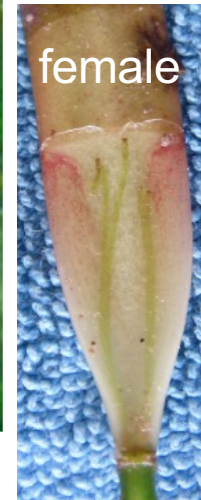
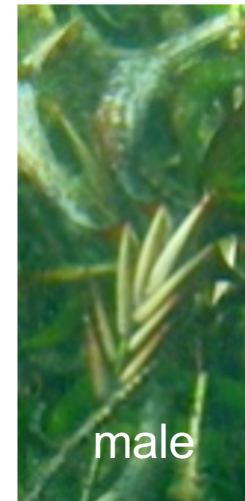
Key

- Cluster of leaves on an erect stem
- Leaves 10-40 cm
- Sickle-shaped leaves with serrated tips
- Rhizome woody
- Dioecious
- Leaves often have red cross-stripes



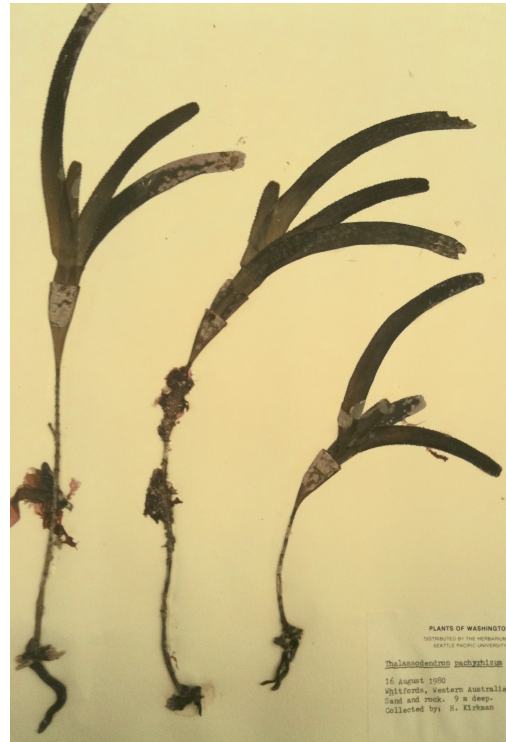
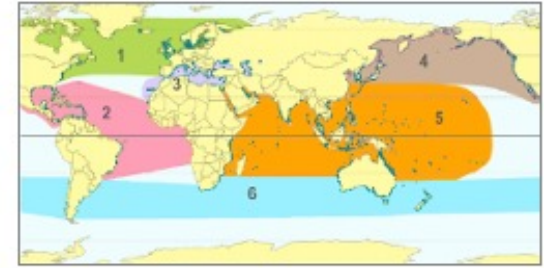
Extinction Risk: Least Concern

Flowering Parts



Tp *Thalassodendron pachyrhizum*

Bioregion
6



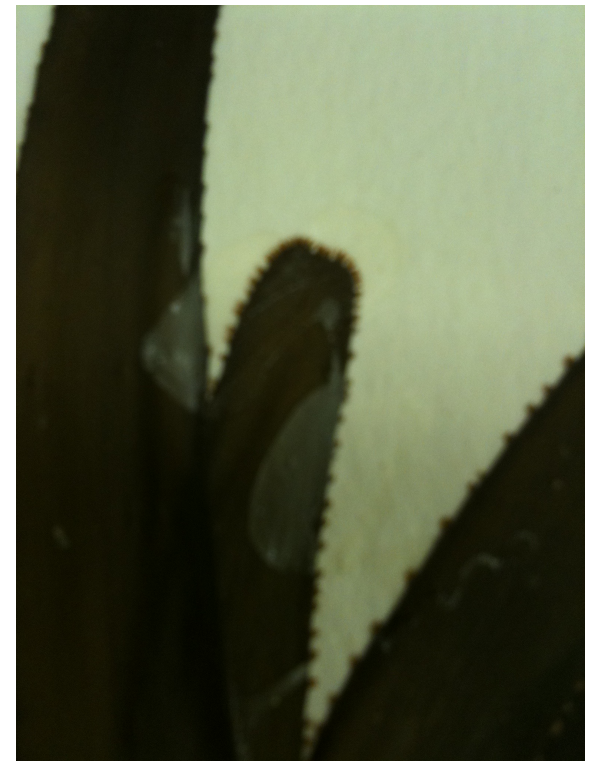
Key

- Cluster of leaves on an erect stem
- Leaves 10-15 cm, thin ribbons
- Sickle-shaped leaves with serrated tips
- Rhizome woody
- Dioecious



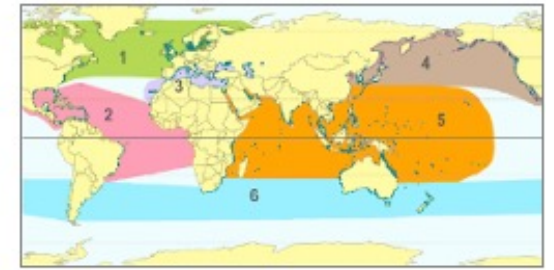
Extinction Risk: Least Concern

Australia only



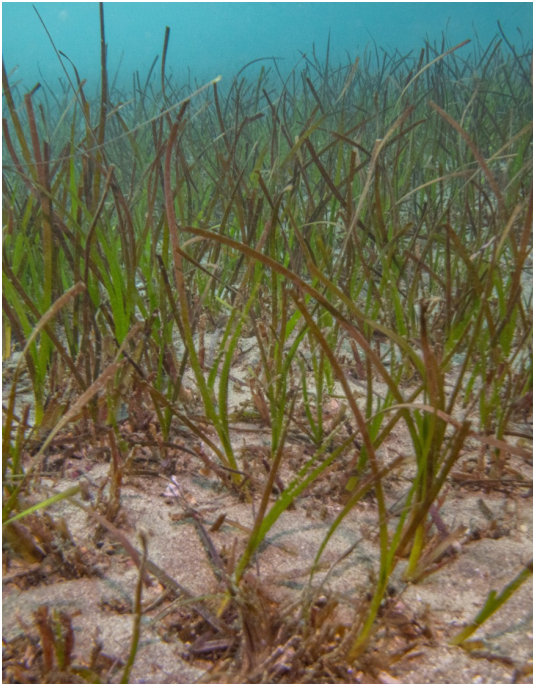
Zc *Nanozostera muelleri*

Bioregion
6



Key

- Round leaf tip deeply notched
- Strap-like leaf blades (1-2 mm)
- Leaves 10-60 cm long
- Persistent leaf sheath
- Monoecious
- Previously known as *Zostera capricorni*

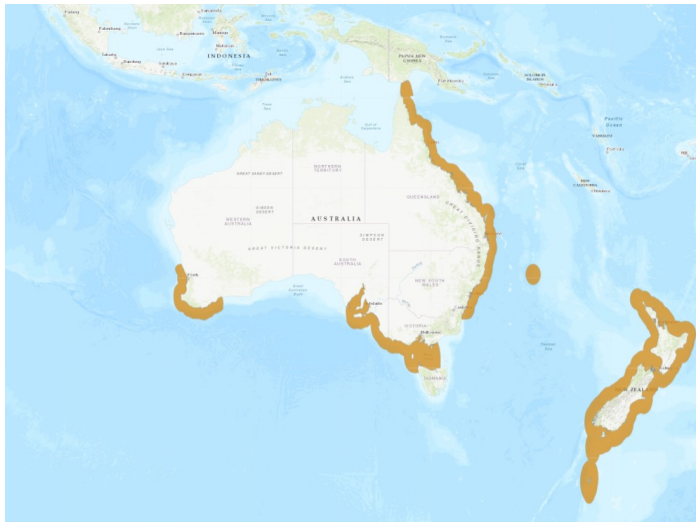


Shaun Lee 2024

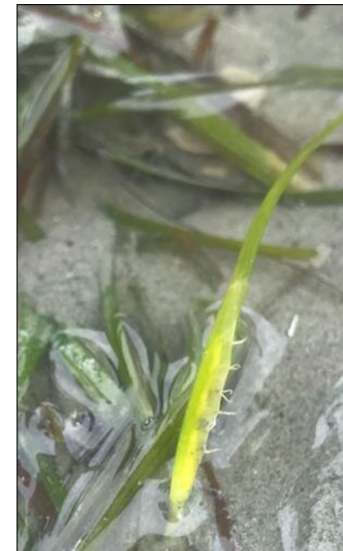


Tony Strazzari

Extinction Risk: Least Concern



Flowering Parts



Rachel Hooks 2024



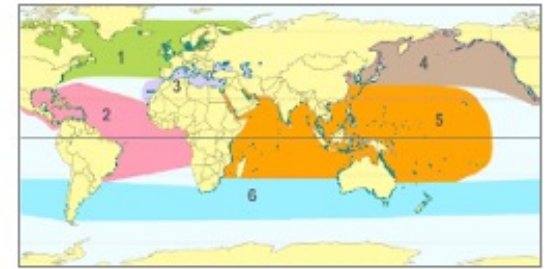
de Kock et al. 2016

female



Zp *Nanozostera capensis*

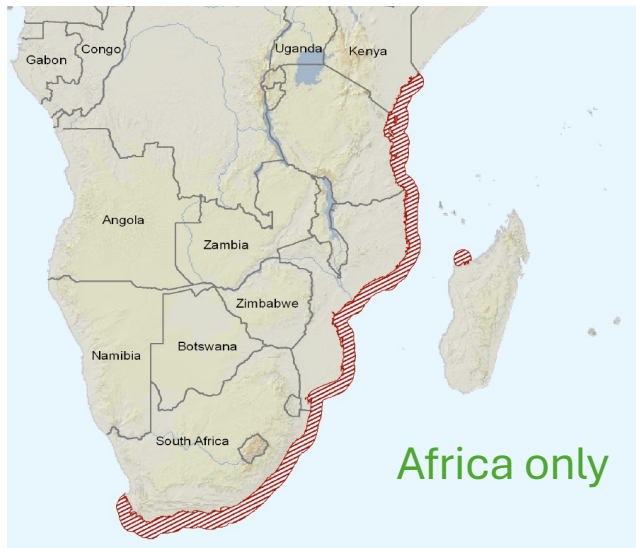
Bioregion
6



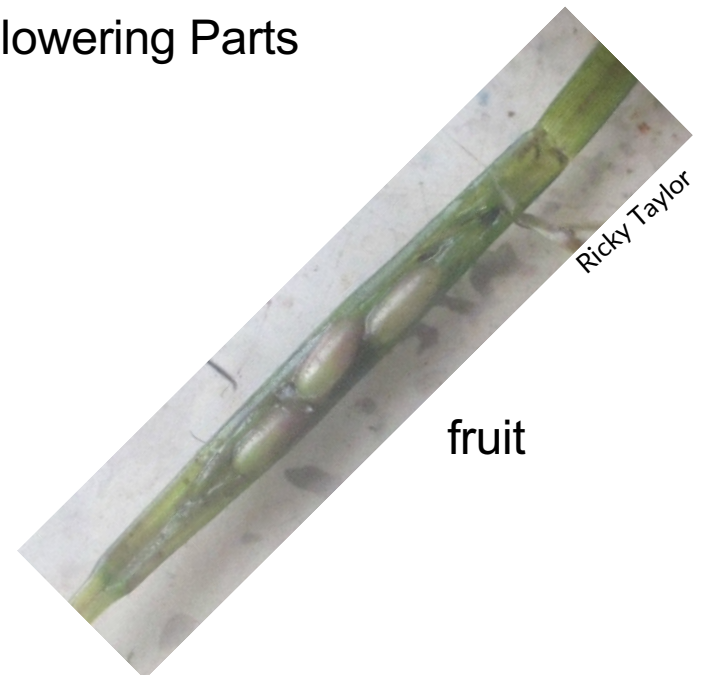
Key

- Round indented leaf tip
- Leaf with staggered cross veins
- Strap-like leaf blades (0.5-2.5 mm)
- Leaves 10-115 cm long
- Persistent leaf sheath
- Monoecious

Extinction Risk: Least Concern



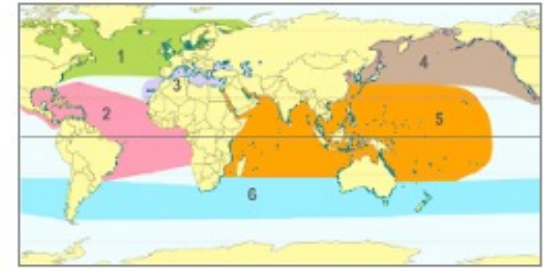
Flowering Parts



fruit

Ha *Halophila australis*

Bioregion
6



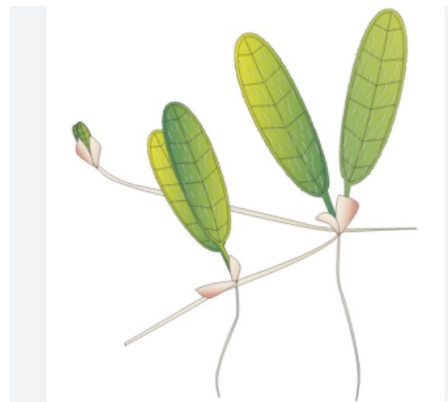
Key

- Oval-shaped leaf pairs
- Leaves 2-7 cm long
- No leaf hairs
- Leaf margins smooth
- Dioecious
- Depth 0-10 m

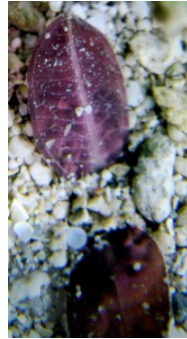
Flowering Parts

Flowers unique on an erect stalk, female with 6 styles.

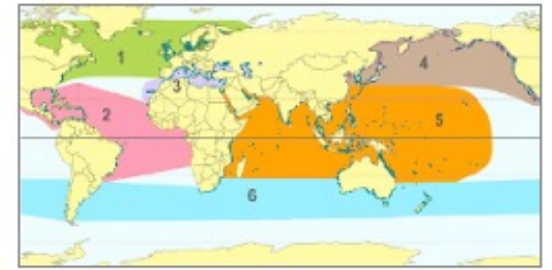
Extinction Risk: Least Concern



Ho *Halophila ovalis*



Bioregion
6



Key

- Oval-shaped leaves
- Leaves 1-4 cm long
- No leaf hairs
- Leaf margins smooth
- Depth 0-10 m
- Dioecious

Flowering Parts



female



male



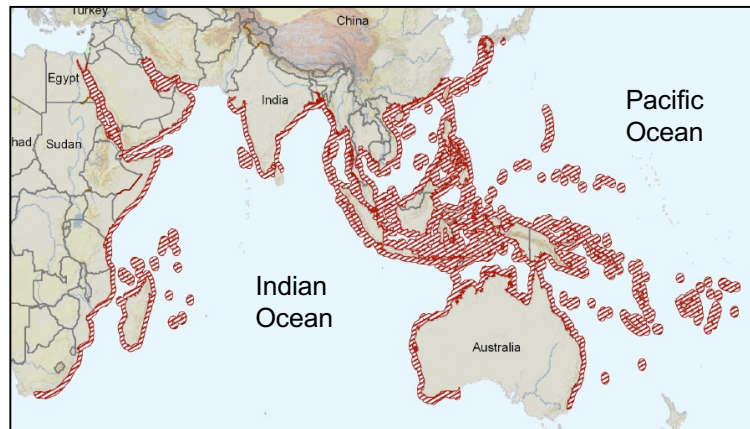
Extinction Risk: Least Concern

Atlantic
Ocean



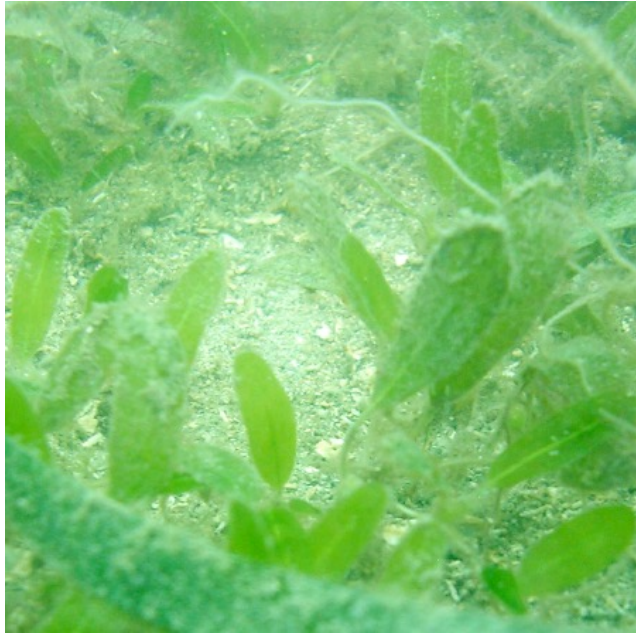
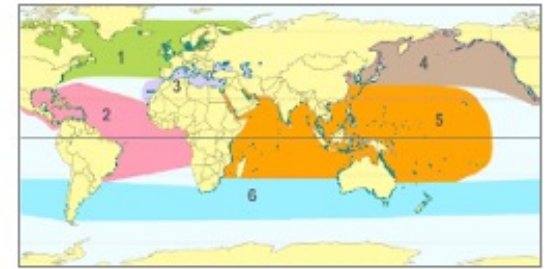
Indian
Ocean

Pacific
Ocean



Hd *Halophila decipiens*

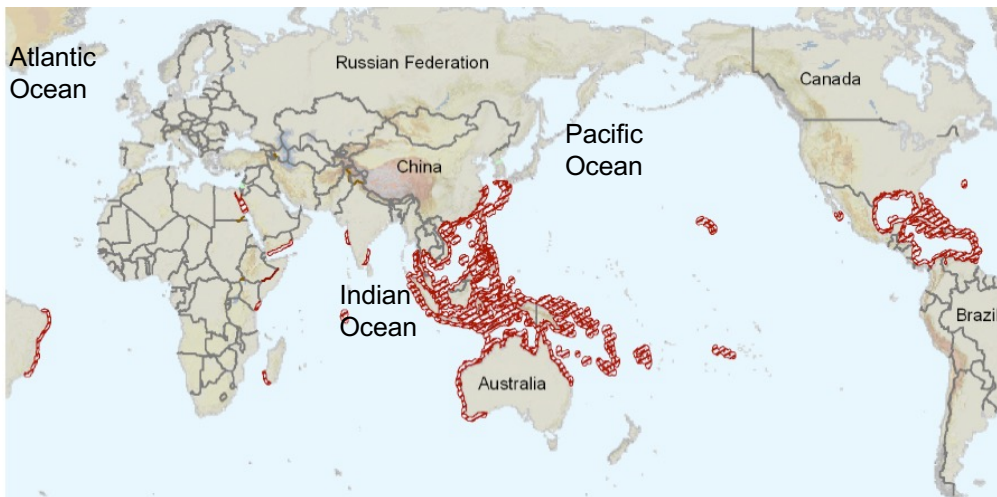
Bioregion
6



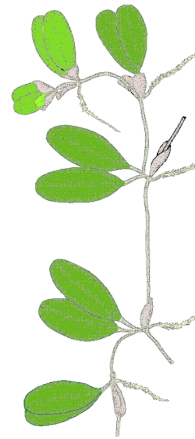
Key

- Paddle-shaped leaves
- Leaf hairs on both sides
- Leaf margins serrated
- Leaves 1-4 cm long
- Monoecious
- Depth 0-30 m

Extinction Risk: Least Concern



Flowering Parts



male & female



fruit

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