# FIELD GUIDE TO COMMON RHODOPHYTA (RED ALGAE) IN THE CHERRY POINT AND FIDALGO BAY AQUATIC RESERVES

Michael Kyte, Spring 2015

**Note:** If a specimen cannot be identified with this key, it may be a species new to the monitoring program. Thus, it is important that the specimen be brought to the attention of one of the program's "experts", photographed, and recorded as Rhodophyta unknown sp. (attach a unique identification number or letter).

#### **CRUSTS**

Soft, not calcified, crusts lacking upright structures (crust without lobes see the brown algae Ralfsia)

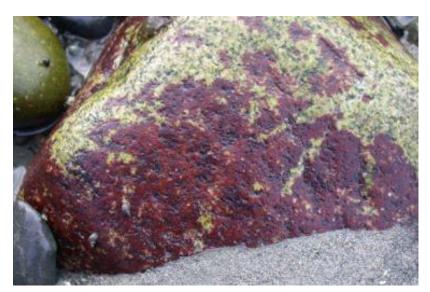
*Mastocarpus* sp.(Turkish Washcloth or Tar Spot) (crust phase).

Crust soft (can be indented with fingernail), usually black to deep red; few to 30 centimeters (cm) (12 in.) in diameter; more common in the lower intertidal zone (ITZ). The Tar Spot is a phase in the *Mastocarpus* reproductive life cycle. *Mastocarpus* is a perennial.



Hildenbrandia sp. (Rusty Rock).

Crust harder (cannot be indented with fingernail), usually lighter red and larger than *Mastocarpus*; large extensive crusts more common in mid to upper ITZ.



#### THREAD-LIKE OR FILAMENTOUS

Ceramium sp. (Staghorn Felt).

Plant erect, delicate, deep red; main axis with many side dichotomous branches (2 equal branches or 'Y' branching); branched; plant up to 18 cm (7 in); may be epiphytic (growing on) on the green algae *Codium fragile* (Sea Staghorn); more common in mid to lower ITZ.



# Polysiphonia sp. complex ("Poly").

Plant more robust than *Ceramium*, grows in tufts; may be epiphytic on coralline algae; radially branched with branches finer giving a "fluffier" or more hair-like appearance; brownish to "sharp red; up to 25 cm (10 in); mid ITZ.



## CYLINDRICAL STEMS

# Cryptosiphonia woodii "Bleached Brunette"

Stems cylindrical, may appear filamentous but not as thin as previous group; radially branched into progressively smaller branches; generally in clusters; tips may be lighter and appear "bleached"; olive brown to deep maroon or blackish purple; 20 to 35 cm (8-14 in); mid ITZ.

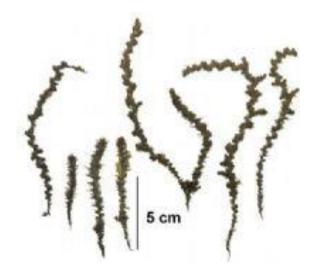


## **BUSH OR BRUSH-LIKE**

# Neorhodomela larix (Rhodomela) Black Pine

Main stem stout with undivided branches whorled around it like a bottle brush; branch tips blunt; black to brownish black; reaching 30 cm (12 in); lower ITZ.





## Odonthalia floccosa Sea Brush

Plant with distinctive highly branched bushy appearance, may be partially flattened; branch tips sharp, tightly clustered; brown to dark red to almost black, tips sometimes bleached to blond; few cm to 40 cm (16 in); may form dense mats; mid to lower ITZ.





#### **BLADES WITH BUMPS**

*Mastocarpus (Gigartina) sp.* (erect phase) Turkish Washcloth

Blades flat with distinct bumps (papillae), like a rough washcloth, may be curled at tips; arise from crustose base, branching dichotomous to irregular; reddish brown (almost black) to yellowish brown, tough, reaching 15 cm (6 in); mid to low ITZ.



# Chondracanthus (Gigartina) sp. Turkish Towel.

This species has not been recorded by either aquatic reserve monitoring program, but it is known to occur in the Cherry Point Aquatic Reserve, and could be confused with *Mastocarpus*.

Simple, unbranched blades, thick (somewhat rubbery), elongate, with short, spiny papillae (bumps) covering the blade surface; purplish to pale red iridescent under water; reaching 30 cm (12 in) tall; low ITZ.



# **BLADES SMOOTH, BRANCHED, FLATTENED**

# Prionitis sp. Bleach Weed

Strap-like, flattened branches feather-like along central stems; thick and tough; smells similar to bleach when crushed; dark reddish brown to almost black; to 40 cm (16 in); low ITZ.





# **BLADES SMOOTH, UNBRANCHED, FLAT**

**Mazzaella** (Iridaea) **splendens** "Rainbow-leaf" or "splendid Iridescent Seaweed"

Blades undivided, sometimes lobed, very rubbery; usually an iridescent brownish or purplish red; to 30 cm (12 in) or taller; low ITZ.



# **BLADES SMOOTH, UNBRANCHED, FLAT (CONT.)**

# Porphyra sp."Nori" or "Purple Laver"

Blades large, very thin; purple (sometimes dark green), up to 40 cm (16 in); very common in mid to high ITZ; sometimes epiphytic on other algae (e.g., rockweed) and mussels and barnacles.





## Smithora naidium "Seagrass Laver"

This species has not been recorded by either aquatic reserve monitoring program, but it is known to occur in the Cherry Point Aquatic Reserve.

Blades small, thin, roundish to elongate; red to purplish pink; to 5 cm (2 in.); blades arise from cushion-like bases along the margins of seagrass blades; epiphytic on native and introduced eelgrass in low ITZ where exposed to moderate to strong waves or currents.

