I. specifically or often on other plants (epiphytes)

Polysiphonia haplodasya — plants minute (arrowed); grows specifically on the red alga Haplodasya urceolata

Polysiphonia daveyae — grows always on other algae

Polysiphonia teges — only known from Albany WA and Spencer Gulf SA

Polysiphonia atricapilla — usually on the seagrass Amphibolis

Polysiphonia succulenta — often on the seagrass Posidonia

Polysiphonia scopulorum — widespread

II. plants usually grow as mats or turfs on rocks

Polysiphonia isogona — widespread in the intertidal (also, larger specimens are found on shells and sea squirts)

Polysiphonia adamsiae — from Tasmania only

Polysiphonia amphibolis — on the seagrass Amphibolis

“Algae revealed”, R N Baldock, State Herbarium SA, July 2014
III. branches tangled

- *Polysiphonia abscisoides*
- *Polysiphonia perriniae* – relatively rare; microscopic segments are up to 16x long as broad
- *Polysiphonia sertularioides* – plants are soft to gelatinous
- *Polysiphonia isogona* – found also as a turf
- *Polysiphonia shepherdii* – basal tendrils present
- *Polysiphonia senticulosa* – microscopic tips are spiny
- *Polysiphonia propagulifera* – a rare, deep water species with basal tendrils
- *Polysiphonia sertularioides* – plants are soft to gelatinous
- *Polysiphonia subtilissima* – threads are extremely slender and floppy

IV branches mainly parallel (fastigiate, that is, not spreading)

- *Polysiphonia constricta* – found in sheltered bays and harbours
- *Polysiphonia propagulifera* – a rare, deep water species with basal tendrils
- *Polysiphonia isogona* – found also as a turf
- *Polysiphonia sertularioides* – plants are soft to gelatinous

“Algae revealed”, R N Baldock, State Herbarium SA, July 2014
V. plants with prominent main branches (axes) and shorter, tufted side branches

*Polysiphonia atricapilla* – plants often grow on the seagrass *Amphibolis*

*Polysiphonia australiensis* – several corticated main branches grow from a common base

*Polysiphonia blandii* – plants are very dark, almost black

*Polysiphonia brodiei* – threads are corticated basally

*Polysiphonia crassiuscula* – main threads are about 1 mm wide

*Polysiphonia decipiens* – minute hooks occur basally

*Polysiphonia forfex* – microscopic tips are claw-like, upper branches mainly one-sided

*Polysiphonia infestans* – main branches are clumped; viewed microscopically, side branches are much narrower than main ones

*Polysiphonia mollis* – often on other plants, a single main branch basally

*Polysiphonia succulenta* – widespread and common, often on Tape grass, *Posidonia*; microscopic tips are pincer-like

“Algae revealed”, R N Baldock, State Herbarium SA, July 2014