

KEY FOR THE SEPARATION OF SPECIES OF CHAETOMORPHA AND RHIZOCLONIUM  
 FOUND ON THE BRITISH COAST.

<sup>based on</sup>  
 (~~from~~ Price, W.M.(1968). Ph.D. Thesis, University of Liverpool).

- 1 (a) Filaments of flaccid nature, cell width less than 48 $\mu$ m, not varying along the filament, mean cell width values falling between 6.6 - 40 $\mu$ m, cells cylindrical in shape, no constriction at the septa, no apparent striation of the cell walls, less than 10 nuclei per cell, nuclei arranged axially, lateral rhizoids growing laterally from the filament sometimes present.....Rhizoclonium riparium  
<sub>also in freshwater</sub>
- 1 (b) Filaments with a crisp texture, cell widths more than 53 $\mu$ m up to 1050 $\mu$ m, cell width increasing from base to apex in attached plants and constant in unattached plants, cell cylindrical to subglobose, cell walls constricted at septa, obviously striated, nuclei parietally arranged, lateral rhizoids never present. ....2
- 2 (a) Filaments attached basally, cell width increasing from base to apex, well developed basal cell .....3
- 2 (b) Filaments basally unattached, cells of constant width along the filament .....4
- 3 (a) Max.cell width between (70)210 - 1050 $\mu$ m, cells 2 - 3 x as long as broad, basal cell as long as 3mm, adjacent cells 8 - 14 x as long as broad, septa constricted giving beaded appearance, colour dark blue-green with a glaucous sheen.....Chaetomorpha melagonium
- 3 (b) max.cell width value (28)120 - 585 $\mu$ m, 1 - 2 x as long as broad, basal cell 1mm approx consisting of 1-9 fused cells, adjacent cells 1 - 4 x as long as broad, septa slightly constricted, plant texture rough, colour dark to yellow green ..... Chaetomorpha linum
- 4 (a) cell width range (30) 40-80 (100)  $\mu$ m, filaments forming tangled skeins on rocks and in pools often associated with Corralina officinalis L. Very occasionally may be found basally attached by a non-differentiated basal cell, colour bright green, yellowing in summer ..... Chaetomorpha capillaris
- 4 (b) Cell width 200-300  $\mu$ m forming thick entangled masses in brackish ditches or on mud banks, colour light to dark green, variable, cells only slightly constricted at septa. ....Chaetomorpha linum