

Studies on Dasyaceae

II. A Revision of the Genera *Eupogodon* and *Dipterocladia* gen. nov. (Ceramiales, Rhodophyta)

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Dipterocladia YSDM de Jong gen. nov., a genus containing marine red algal species belonging to the Dasyaceae, Ceramiales, formerly put into *Eupogodon* Kützing, is described and a revision of the genus *Eupogodon* is presented. *Dipterocladia* forms a monosiphonous pseudolateral and a polysiphonous determinate sympodial lateral on each segment of the main axis in a pairwise distichous manner, a branching form which is unique within the Dasyaceae. The new genus has an alternating counterclockwise sequence of periaxial cell formation, a distichous alternating branching symmetry, a bilateral organisation, post-sporangial cover cells and monosiphonous pseudolaterals arising from each axial segment. *Dipterocladia* is accepted to include two species: *Dipterocladia pinnatifolia* (Suhr) YSDM de Jong and *D. pulchella* (Weber-van Bosse) YSDM de Jong. Features of the female reproductive system of *Eupogodon planus* (C. Agardh) Kützing are described here for the first time and this system appears to be similar to that described for *E. spinellus* (C. Agardh) Kützing. Detailed observations of the growing tip of *Eupogodon planus* reveal a secondary bilateral organisation of the axes and periaxial cells cut off in a circular clockwise sequence. Maintenance of the traditional genus *Eupogodon* is proposed. *Eupogodon* is defined by features of the tetrasporangial stichidia, including the numbers of tetrasporangia developed in each fertile segment (7 to 9) and a polysiphonous, sessile insertion of the stichidia and by the typical 'spine-like' polysiphonous base of the pseudolaterals. *Eupogodon* is accepted to include five species: *Eupogodon apiculatus* (C. Agardh) Silva, *E. penicillatus* (Zanardini) Silva, *E. planus*, *E. spinellus* and *E. tenellus* (Weber-van Bosse) Silva. An overview and a key of the family Dasyaceae is provided, using vegetative structures.

