

Holdfast and Shoot Differentiation in the Sporelings of *Hypnea cervicornis* J. Agardh (Rhodophyta, Gigartinales)

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Abstract

Holdfast and shoot differentiation in the Sporelings of *Hypnea cervicornis* J. Agardh has been investigated for the first time. It was observed that the holdfasts of this species are not simple unicellular structures but consist of large masses of cells differentiated from amongst the superficial cells at the points of contact with the substratum. After or during holdfast differentiation, the morula-like mass of cells produced shoot Initials. One to four Initials were observed. When three or more initials were differentiated at the same time, stellate stages were formed. The stellate stages in *Hypnea* ontogeny are discussed with reference to similar structures reported in taxonomic literature as diagnostic criteria for *H. cornuta* (Lamour.) J. Agardh.