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共生藻細胞壁醣蛋白參與海葵和其共生藻共生機轉的建立

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一般認為細胞膜上的醣蛋白 (glycoprotein) 是細胞間互相辨識的分子，本研究則進一步研究共生藻細胞壁上的醣蛋白與海葵宿主形成共生時所扮演的角色。當單離之共生藻受 trypsin、 α -amylase、N-glycosidase F 或 O-glycosidase 處理後，其進入白化海葵細胞中，並恢復共生的能力明顯低於未處理之共生藻，若以 lectin 來遮蔽共生藻表面的醣蛋白時，亦有相同之效果，進一步以 SDS-PAGE 及西式點墨法分析共生藻表面之醣蛋白時，發現 10 條主要蛋白質染色帶中有 5 條是被鑑定為醣蛋白，其中醣基之結合模式，初步鑑定出有二種，即 mannose-mannose 和 galactose- β (1-4)-N-acetyl glucosamine，而且發現量最多的醣蛋白 (64 Kda) 具有 mannose 的末端醣基，這些結果顯示，當共生藻與海葵 (*A. pulchella*) 形成共生關係時，共生藻表面之醣蛋白將扮演重要的角色。

關鍵詞：共生藻，刺絲胞動物，胞內共生，植物凝集素，識別機制。

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