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***Epithallus sloughing:  
a self-cleaning  
mechanism for  
coralline algae***

An important ecological role of coralline algae on reefs (Littler and Littler 1997) is to inhibit the settlement and subsequent colonization of fleshy algae and other fouling organisms. Coralline algae represent one of only three red algal families (Corallinaceae, Sporolithaceae and Delesseriaceae) that possess intercalary cell division; as a result, they are able to shed apical cells either synchronously or diffusely. This results in the sloughing of upper epithallus cell layers, which reduces fouling processes (Johnson and Mann 1986, Littler and Littler 1997) in many crustose and articulated coralline algae. Because it occurs on a macroscopic scale, we frequently observe synchronous sloughing in such species as *Neogoniolithon fosliei* (Heydrich) Setchell & Mason and the concomitant detachment of large epiphyte loads [compare upper photo (showing loosened grey epithallus and attached epiphyte) with lower photo (after gently fanning); Great Astrolabe Reef, Fiji], suggesting the widespread importance of this phenomenon under natural conditions.

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**References**

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Reef sites

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