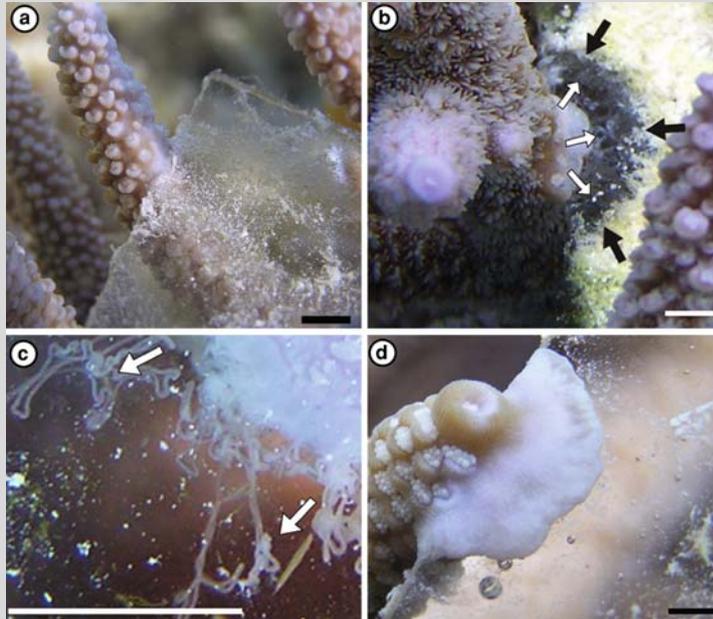


# Mesenterial filaments make a clean sweep of substrates for coral growth

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**Fig. 1** **a** Accumulation of detrital matter on glass slides following lesion induction of *Acropora pulchra* branches. **b** Pre-emptive cleaning of substrates (perimeter marked by black arrows) surrounding growing margins of *Acropora pulchra* by mesenterial filaments (white arrows). **c** Close-up of protruding mesenterial filaments actively feeding and removing detritus. **d** Tissue growth and calcification onto cleaned surface 90 days following lesion formation (scale = 3 mm)

of particulate organic carbon and nitrogen present in detrital matter (Wild et al. 2004) represent a rich heterotrophic food source for the polyps bordering regenerating lesions and may in part contribute to the considerable rates of lesion regeneration in this species.

## References

- Lang J (1973) Interspecific aggression by scleractinian corals: 2 Why the race is not only to the swift. *Bull Mar Sci* 23:260–279
- Lang J, Chornesky EA (1990) Competition between scleractinian reef corals - A review of mechanisms and effects. In: Dubinsky Z (ed) *Ecosystems of the world: Coral Reefs*. Elsevier, Amsterdam, pp 209–252
- Wild C, Huettel M, Klueter A, Kremb SG, Rasheed MYM, Jørgensen BB (2004) Coral mucus functions as an energy carrier and particle trap in the reef ecosystem. *Nature* 428:66–70

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# Reef sites

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