Techniques needed and shape

**Classification**
*Descriptive name*
Phylum: Chlorophyta; Order: Cladophorales; Family: Cladophoraceae

**Features**
loose-lying rough green threads (differing in touch to other softer thread-like green algae such as *Cladophora*)

**Special requirements**
plants occur as tangled, green, *unattached* strands to 150mm long in *shallow* water

view the threads microscopically to find:
1. threads are *mostly unattached*, fairly *straight* and 105-130μm wide
2. threads are the *same width* throughout their length
3. cells are box-shaped, with length to breadth (L/B) = 1.5-2.5
4. cell walls are relatively *thin* and often collapse when dried.

**Occurrences**
from India and Queensland. In southern Australia, from Walpole Inlet, W Australia and Coffin Bay, S. Australia to Port Phillip, Victoria.

Probably more widespread but un-observed

**Usual Habitat**
in shallow sheltered water, often tangled with other algae

**Similar Species**
other unattached *Chaetomorpha* spp with hair-like threads found on tidal flats, for example, *Ch. capillaris* but in *Ch. indica*, filaments are thicker, cell walls thinner and plants are found in the upper subtidal.

**Description in the Benthic Flora**  Part I, pages 177, 178, 180

**Details of Anatomy**

1. *Chaetomorpha indica* slide (6798) stained blue and viewed microscopically to show
   - straight, unbranched threads
   - box-shaped cells where L/B = 1-2, with relatively thin cell walls

2. *Chaetomorpha indica* (A13756b) from Coffin Bay, S Australia in shallow water on tidal flats

* Descriptive names are inventions to aid identification, and are not commonly used

“Algae Revealed” R N Baldock, S Australian State Herbarium, June 2007