Recently, a spiny-skinned sea creature belonging to the marine group of animals called echinoderms has been causing great concern among marine scientists and environmentalists. The culprit—the crown-of-thorns (COT) starfish (Acanthaster planci)—outbreaks of COT population can inflict serious damage on broad areas of coral reefs.

COT is a predator. It eats small reef building animals called coral polyps. Coral polyps usually construct communal limestone homes which are built up into a multitude of shapes and sizes that eventually give rise to what is known as 'coral reef.'

After finding a suitable prey, the COT pulls its stomach out through its mouth (a process known as 'stomach eversion') over the coral polyps and releases digestive juices onto the coral, breaking down the polyp's tissue into a readily absorbed 'polyp soup.'

One adult starfish can devour as much as 13 square meters of coral a year...

When present in large numbers, the COT often eat together in a group called 'aggregations.' Research has shown that chemicals released during the digestion of corals can actually attract other starfish to a feeding site...

Downloaded by [Anonymous] from http://repository.seafdec.org.ph on December 15, 2018 at 3:50 PM CST
Marine cot researcher thinks that cot outbreaks are not unique. Outbreaks are being recorded in the Indo-Pacific area which are affected by such outbreaks...

* Non-outbreak - There are less than 30 cot's per hectare of reef.
* Incipient outbreak - Presence of high densities of cot juvenile.
* Spot-outbreak - High density population of cot's in parts of a reef.
* Active outbreak - There's more than 30 mature cot's per hectare of reef.

Cot's researchers are working closely with their counterparts in other countries...

... sharing research results and adding to the pool of knowledge so that they may be able to observe the whole cycle and control specific areas...

Among the new developments:
- Injecting cot's with dry acid, (sodium bisulphate) lethal, yet environment-friendly...
- New surveillance techniques allowing early detection of any increase in cot juvenile population which leads to...
- Pinpointing factors that lead to cot outbreaks, and...
- Contingency plan to be activated in dealing with outbreaks including localized control measures and expanded observation network and new research initiatives...

Dry acid is limited to small-scale clearing of cot's in areas important to tourism or research...

For more information about cot's:

The cot's coordinator GBRMPA P.O. Box 1379 Townsville, Queensland Australia Fax (077) 726093