

Table 1 Acidic and neutral proteolytic activity in the gut of *D. cingulatus* and *A. cocquebertii*.

Group	Specific activity (Unit/mg protein)		Activity (Unit/gut)	
	pH 2.0	pH 7.0	pH 2.0	pH 7.0
<i>D. cingulatus</i>				
Males starved	3.0	1.2	0.18	0.0
Males fed	2.0	1.5	0.12	0.1
Females				
starved	2.0	1.4	0.12	1.4
Females fed	1.7	1.9	0.10	1.9
<i>A. cocquebertii</i>				
Males starved	1.98	0.0	0.12	0.0
Males fed	2.08	0.0	0.13	0.0
Females				
starved	1.71	0.0	0.11	0.0
Females fed	1.72	0.0	0.10	0.0

The activity was higher in starved *D. cingulatus* and in fed *A. cocquebertii*.

Different proteolytic enzymes are found in the gut and salivary glands of different insects according to the nutrients in their diet. Generally proteolytic activity depends upon the quantity of protein ingested by the insect³. *D. cingulatus* is a sap-sucking bug that feeds on Malvaceae plants and require enzymes which act in acidic as well as at neutral pH optima to digest plant proteins. On the other hand, the predatory *A.*

cocquebertii feeding on *D. cingulatus* requires enzymes which act on proteins only at acidic optima and this completely fulfils the demands for the digestion of the proteins received from the prey.

In view of the remarkable ability of *A. cocquebertii* to suck the content of all stages of *D. cingulatus* including eggs, it is likely that *A. cocquebertii* injects saliva containing proteolytic and other enzymes into its prey before it actually starts feeding and the enzymes may cause lysis of the internal tissues leaving only the cuticular and collagenous structures.

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NEWS

LASER BEAM HELPS TREAT ULCERS

Moscow medical surgeons have started treating ulcers with the help of the laser beam. Each treatment session lasts just a few seconds. Laser makes the operations bloodless and totally painless for patients. Soviet laser instruments for eye surgery are patented in other countries.

New Laser Surgery for Treatment of Glaucoma

Soviet medical scientists have developed a new

surgical laser instrument for better treatment of glaucoma. The beam of the new laser surgical instrument rips the tissue to form a hole, 0.05 mm in diameter. The intraocular fluid is gradually drained through it. The operation lasts a fraction of a second. It is painless and what is the main thing is not traumatic to the eye. (*Soviet Features*, Vol. XXIII, No. 194, December 27, 1984).