

TABLE I  
Histochemical reactions

Test	Reaction	Remarks
Periodic acid-Schiff (PAS)	.. ++	
PAS (after saliva)	.. ++	
PAS (after pyridine extraction)	.. ++	
Aldehyde fuchsin	.. +	
Alcian blue	.. ++	
Bismarck brown	.. +	
Toluidine blue	.. Red	Gamma metachromacy
Safranin O	.. Orange	Negative metachromacy
Sudan black B	..	

++ Intense reaction.  
+ Moderate reaction,  
- Negative reaction.

These tests allow us to conclude that the cells secrete mucopolysaccharides. Similar gland cells were observed in the region of the oesophagus around maxillae and maxillipedes. The precise functions of these gland cells in the appendages are well worth investigating further.

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Andhra University, K. HANUMANTHA RAO.  
Waltair, November 13, 1973.

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A NEW RECORD FOR *PALAEEMON (PALAEEMON) CONCINNUS* DANA, 1852 (DECAPODA, PALAEMONIDAE), FROM INDIA

THERE are relatively few studies on the smaller species of palaemonids in India. In view of their importance in the subsistence fisheries, we have undertaken an investigation of these and other prawns inhabiting the estuary and the system of

irrigation canals of river Krishna opening into the Bay of Bengal.

The present note is the first report of *Palaemon (Palaemon) concinnus* Dana, 1852, from the Indian subcontinent. One specimen each of this species was present in two samples collected in the irrigation canal off Nizampatnam. The relevant data are presented in Table I.

TABLE I  
*Palaemon concinnus* Dana. Salient measurements in the two specimens and rostral teeth formula (RTF)\*

Date	Sex	TL mm	CL mm	RL mm	RTF
July 1, 1973	♀	37	7	9	1+4+1 5
August 28, 1973	♂	40.5	7	10	1+5+1 5

\* In the rostral formula the three kinds of dorsal teeth: carapace, rostral and subterminal are indicated separately.

The specimens conform to the description of Holthuis<sup>1</sup>, but the salient characters are now stressed. In both specimens the rostrum (Fig. 1 a) extends

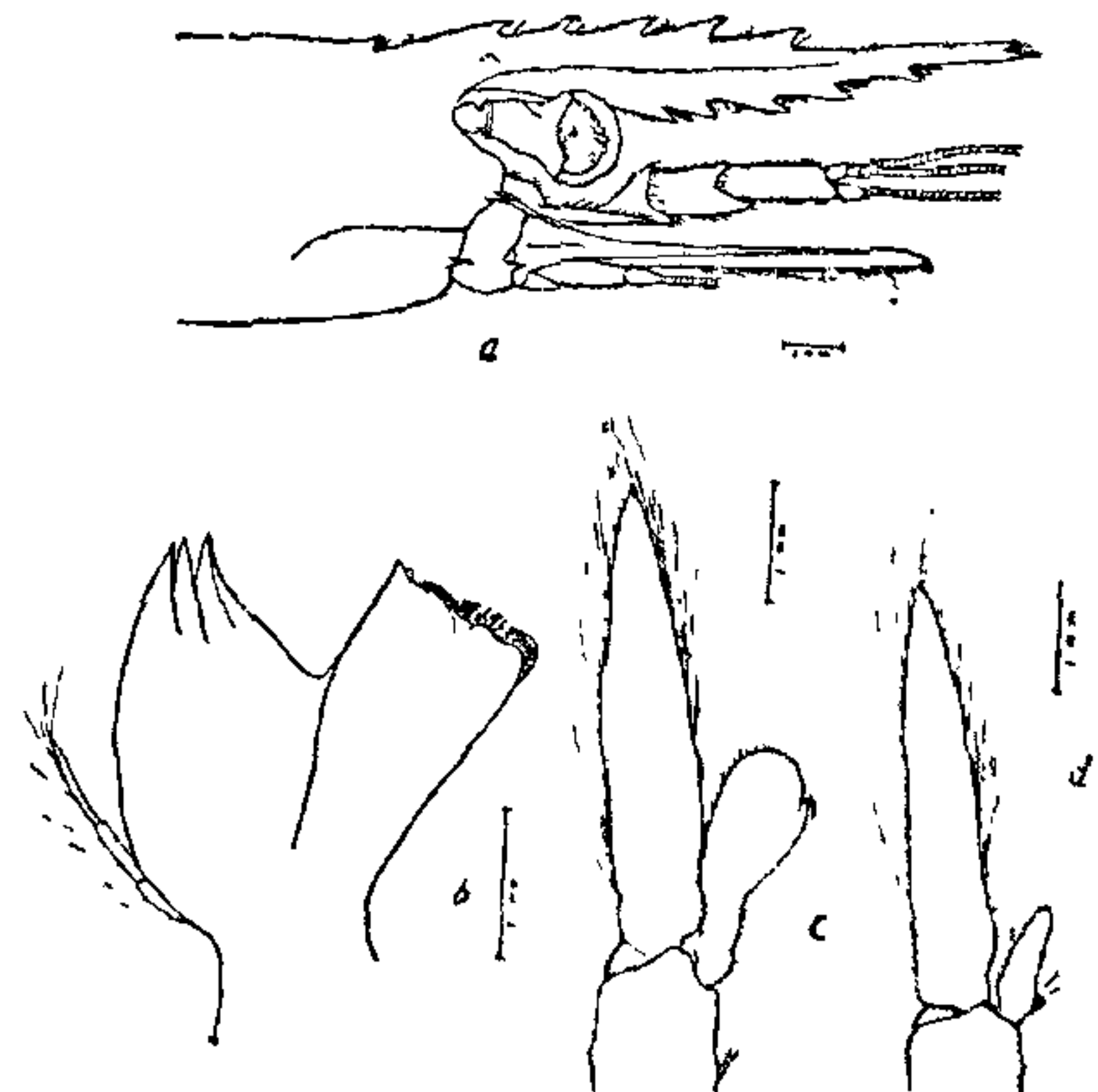


FIG. 1. *Palaemon (Palaemon) concinnus* Dana, 1852. a, anterior region of male; b, mandible; c, first pleopod of male; d, first pleopod of female.

distinctly beyond the scaphocerite. The first dorsal tooth is placed behind the orbital angle and there is a distinct dorsal subterminal tooth. According to Holthuis<sup>1</sup> the first and second dorsal teeth

TABLE II

Species	Locality	Collector and Year
<i>Palaeomon debilis</i> Dana, 1852 (as <i>Leander gaudeneri</i> )	Maldives	R. B. S. Sewell, 1923
<i>P. sewelli</i> (Kemp, 1915) (as <i>L. Sewelli</i> )	Goa; Ganjam coast	S. Kemp, 1916 'Investigator' 1890
<i>P. serrifer</i> (Stimpson, 1860) (as <i>L. serrifer</i> )	Bandra (in Greater Bombay)	J. W. Caunter, 1911
<i>P. pacificus</i> (Stimpson, 1860) (as <i>L. pacificus</i> )	Goa; Cape Comorin	S. Kemp, 1916 S. N. Pillay, 1911
<i>P. belindae</i> (Kemp, 1925) (as <i>L. belindae</i> )	Gulf of Mannar; Cape Comorin	S. Kemp, 1913 S. N. Pillay, 1911

articulate with "the rostrum proper", but his figure (Fig. 12a) does not indicate such articulation; our specimens conform to his figure. The fifth and sixth abdominal pleura end posteriorly in acute points, those of the sixth appearing almost spinous. The telson ends in a distinctly pointed tip.

The mandible bears a prominent palp which is distinctly three-jointed (Fig. 1b), as in the material examined by Holthuis<sup>1</sup>.

In the male, the carpus of the second pereopod is relatively longer than in the female. In the male, 1/3 of even the propodus of fifth pereopod extends beyond the scaphocerite, whereas in the female only the dactylus of this pereopod extends beyond it.

Typically, the endopod of the first pleopod in the male is provided mesially with a distinct rudimentary appendix interna which is absent in the female (Fig. 1c, d). The male bears a well-developed appendix masculina; the female is not sexually mature, because the pleopods are devoid of breeding setae.

Both specimens were captured in dragnets during low tide. The female occurred at a point midway between two regions where the salinity was 33.75‰ (at mouth) and 6.42‰ (higher up along canal), respectively. The male occurred at a point where the salinity was 4.02‰.

Holthuis<sup>1</sup> has shown that the species has been recorded from Suez in the west to the island of Makatea (in central Pacific) in the east, except for a wide gap between east Madagascar and Hongkong, from which region there is no record. According to Kemp<sup>2</sup>, five other species of the subgenus have been recorded from India (See Table II).

We have not come across any of the above five species in our collections, so far.

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#### THE COMMON BAYA (*PLOCEUS PHILIPPINUS*) —A SERIOUS PEST OF AGRICULTURE

THE scientific assessment of the food of birds from the agricultural point of view was first made in this country by Maxwell-Lefroy in 1912. Ali (1936, 1972), Hassain and Bhalla (1937) and a few others gave some information on the food of birds affecting agriculture. Considering the importance of such studies and lack of sufficient data, feeding ecology and the mode of control of the common Baya, *Ploceus philippinus*, which is supposed to be a destructive pest of cereal crops of India was started early in 1968 in the West Bengal State Agricultural Farm, Chuchura. The farm encompasses an area of about 210 acres of which nearly 180 acres were cultivated and the remaining 30 acres were covered with bushes of *Lantana*, *Sesbania*, *Agava* and grasses. Apart from paddy and wheat, gram, corn, sugarcane and mustard were grown in the farm.

Birds were trapped in the farm between 7-30 A.M. and 9-30 A.M. After taking all necessary data like weight, temperature, etc., they were sacrificed for stomach analysis by usual procedure. The rate of digestion of rice grains was measured in two sets of experiments. Four Baya in each case was kept separately in cages through the night. The next morning when their stomach was empty, each of them was fed with 2 g of rice grain. At an interval of one hour, two hour, three and three and half hour, they were sacrificed. By opening the stomach the rate of digestion of rice grain was noted.