

integument. Fig. 2 gives a semi-diagrammatic representation of this condition as seen in a L.S. of the ovary. In each ovule one or two uppermost lobes were larger and each contained one or in some cases two embryo-sacs. On the other hand, the lobes in the lower part of the ovule were comparatively smaller and sterile. The naked condition of the ovules inside the ovary is comparable to that of the "mamelon" of the Loranthaceae. The number of embryo-sacs per ovule varied from one to three. One of the embryo-sacs was found to be 4-nucleate and appeared normal. One 8-nucleate embryo-sac was normal, being similar to a fully-formed embryo-sac of a normal ovule. Three embryo-sacs were 18-, 16- and 4-nucleate and were of abnormal type. The exact position of the nuclei in these could not be clearly made out. Other embryo-sacs were 4-, 8-, 15- and 21-nucleate. They differed widely both from the normal embryo-sac and from one another in their size and shape and the organisation of the nuclei. A full account of them with all the diagrams will be shortly published elsewhere.

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April 18, 1935.

<sup>1</sup> *Curr. Sci.*, 1935, 3, 300-301.

#### An Instance of Reversion of Floral Parts in *Quisqualis indica*.

WHILE casually looking at a plant of *Quisqualis indica* in the Botanical Gardens of the Benares Hindu University, in April 1934, a single large petaloid structure like the sepal of *Mussaenda*, among an inflorescence attracted my attention. On examination, it was found that the whole of the calyx tube of a flower was modified into a single structure like the sepal of *Mussaenda*, without any evidence of a tubular structure at all. This was arising, not from the inflorescence axis, but from the subtending bract, and with the latter, two bracts belonging to two adjacent lateral normal flowers, have also fused by their edges up to a considerable length. On the posterior surface of the single sepal was attached only one stamen with a normal anther.

As for the gynæcium of this flower, there is no trace of it, but just in the axil of this modified structure, is an organ perfectly

leaf-like both as regards colour and general appearance, and is about five times the size of an ordinary bract. This structure has not got any connection with any other flower, and it may be regarded as a modification of the gynæcium.

These abnormalities may be considered as reversions to the foliar nature of the floral parts, although the cause of such a reversion cannot adequately be explained at present. The gynæcium has completely reverted to the leaf-form. The tube-like calyx of the normal flower has been modified to a large leaf-like form, but brightly coloured. This reversion itself explains the fusion of the bract with it, and points to a closer relation to a leaf, because leaves generally do not have any subtending structures.

In the specimen, the basal region of the bracts has been twisted, so that for outward appearance, the posterior side became the anterior, and *vice versa*.

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Rajahmundry,  
April 29, 1935.

#### Notes on a Collection of *Paguridea* from Porto Novo.

A COLLECTION of *Paguridea* from the backwaters of Porto Novo and its neighbourhood belongs entirely to the two families *Paguridae*, Dana, and *Coenobitidae*, Latreille. *Paguridae*, Dana, is represented by the three genera, *Diogenes*, Dana, *Pagurus*, Fabricius, and *Clibanarius*, Dana, while the *Coenobitidae*, Latreille, is represented by the single genus *Coenobita*, Latreille.

##### GENUS, *Diogenes*, DANA.

The following species of the genus are included in the present collection:—

(1) *D. custos*, Fabricius. This is the most common species of the locality and a large number of them have been collected. The members of this species are found to inhabit the shells of as many as twenty-two species of gastropod molluscs.

(2) *D. diogenes*, Herbst. This is not as common as *D. custos*, Fabricius.

##### GENUS, *Pagurus*, FABRICIUS.

The species belonging to this genus are comparatively rare in the locality and the genus is represented by only two species, mentioned below:—

(1) *P. hessii*,<sup>1</sup> Miers. This is the largest and most brightly coloured species of the collection. Only two specimens have been collected.

(2) *P. punctulatus*, Oliver. This is also large and is characteristically coloured species. Only one specimen is present in the collection.

GENUS, *Clibanarius*, DANA.

The following species of the genus have been collected:—

(1) *C. olivaceous*, Henderson.<sup>2</sup> This is a very common, small, backwater species of the locality.

(2) *C. longitarsis*,<sup>3</sup> de Haan. The species is fairly common, occurring along with *C. olivaceous*, Henderson, from which it can be easily distinguished by the presence of red and blue stripes on the legs and by the absence of any lines on the eye-stalks.

(3) *C. infraspinatus*, Hilgendorf. The species is rare in the locality and only one specimen is present in the collection. This is a fairly large, orange-yellow specimen having a carapace of 30 mm. long and is easily distinguished, by the presence of a strong, conical tubercle on the undersurface of the merus of the chelipedes.

(4) *C. arethusa*, de Man. It is fairly common in the locality.

(5) *C. aquabites*, de Haan.<sup>4</sup> It is not common in the locality. Only one specimen has been collected.

GENUS, *Coenobita*, LATREILLE.

The members of this genus seem to prefer heavy, gastropod shells for their abodes. It is represented by the two species specified below:—

(1) *C. cavipes*, Stimpson. Only one large specimen has been collected. It appears to be rare in the locality.

(2) *C. rugosus*, Milne Edwards. It is fairly common; but it does not grow to a very large size. It is easily distinguished from *C. cavipes*, Stimpson, by the presence of a stridulating mechanism on the left palm.

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Annamalainagar,  
April 15, 1935.

<sup>1</sup> The key in Dr. Sundara Raj's "*Paguridea*" (*Bulletin of the Madras Government Museum*, New Series—Natural History Section, Vol. 1, No. 1, 1927, p. 131) does not include this species.

<sup>2</sup> The key in Colonel Alcock's "*Catalogue of Pagurides in the collection of the Indian Museum*" (1905, pp. 42 and 43) does not include the two common South Indian species *C. olivaceous*, Henderson, and *C. longitarsis*, de Haan.

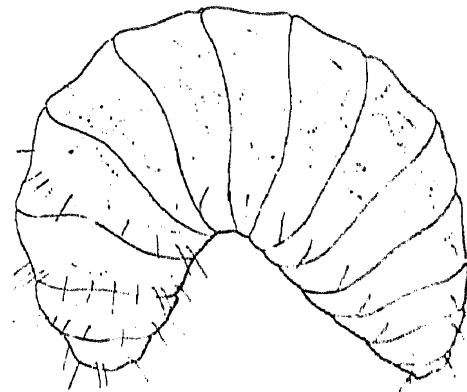
<sup>3</sup> Dr. Sundara Raj (*vide Bulletin of the Madras Government Museum*, New Series—Natural History Section, Vol. 1, No. 1, p. 130) suggests that the

species *C. padarensis*, de Man, which has been recorded by Dr. Henderson (*vide Transactions of the Linnean Society*, (2) Zool. V, p. 423) from Ram-eswaram might quite likely be *C. longitarsis*, de Haan, since the two species at that time have not been sufficiently distinguished from each other.

<sup>4</sup> This species has not been recorded from Krusadai Island by Dr. Sundara Raj. It has been recorded from the back-waters of Eamur and is present both in the collection of the Madras Government Museum and in the Fisheries Bureau at Eamur.

The Host of *Eupelmus tachardiae*, How.

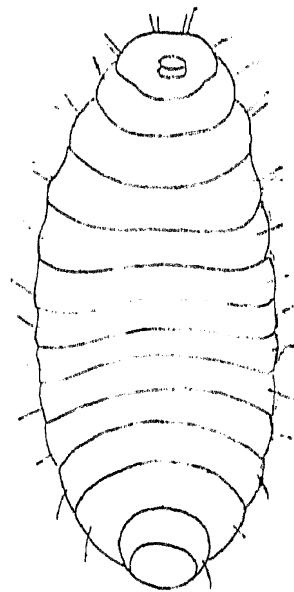
SOMEONE has said, "what I say thrice is right"; acting according to this principle Negi and Glover<sup>1</sup> have repeated for the third time what they asserted twice before.<sup>2,3</sup> While they stress the point—it is the third time their claim appears in print—, I beg equally to emphasise, thrice have they neglected to bring forth any illustrations or details with regard to the life-history of the insect or any objective information.



1 mm.

Fig. 1.

*Brasema annulicaudis*.



1 mm.

Fig. 2.

*Brasema annulicaudis*.