

of activity between 9 a.m. and 6 p.m., those hours have been omitted from the figure.

Like many other nocturnal animals,<sup>3,4</sup> *B. bengalensis* shows strong peak of activity shortly before dawn and a tendency toward a weaker, less regular peak in the early hours of the night (Fig. 1).

Although these three individuals probably reflect the activity patterns of bandicoots in medium or low populations, until further studies are made, caution should be used in generalizing about the daily cycle of activity of bandicoots in high population (as in godowns in large cities), since population density is known to have far-reaching effects on the behaviour of animals.<sup>5,6</sup>

The Johns Hopkins University,  
Center for Medical Research  
and Training,  
c/o. All-India Institute of  
Hygiene and Public Health,  
110, Chittaranjan Avenue,  
Calcutta (India), June 22, 1966.

DWAIN W. PARRACK.

1. Deoras, P. J. and Gokhale, M. S., *J. Bombay Nat. Hist. Soc.*, 1958, **53**, 450.
2. Spillett, J. J., personal communication, 1966.
3. Pearson, O., *J. Mammal*, 1959, **40**, 169.
4. Brown, L. E., *Proc. Zool. Soc. London*, 1956, **126**, 549.
5. Christian, J. J. and Davis, D. E., *Sci.*, 1956, **146**, 1550.
6. Leyhasen, P., *Discovery*, September 1965, p. 7.

### TARAXEROL FROM RUBBER LEAVES

THE tree *Hevea brasiliensis* (H. B. K.) Muell-Arg (Euphorbiaceae) is well known for its latex used in the manufacture of rubber. The press cake or extracted meal of rubber seeds is used as a fertilizer or as a medium protein concentrate feed for livestock. Excepting for the reported presence of the cyanogenetic glycoside, linamarin, in the seeds and the composition of the seed oil,<sup>1</sup> it seems that no other chemical studies have been reported so far in the literature. In view of the reported toxicity of rubber leaves to cattle in Kerala State, detailed chemical examination of the leaves was undertaken.

The leaves were obtained through the courtesy of the Principal, Kerala Veterinary College, Trichur. Air-dried and powdered leaves were repeatedly extracted with boiling alcohol and the combined filtrates were distilled under reduced pressure to remove the solvent. The residue was digested with petroleum ether

(40–60°) and the extract was decolourised with animal charcoal. The filtrate was concentrated to a small volume and allowed to cool in the refrigerator when a white precipitate was deposited at the bottom of the flask. The compound was separated and repeatedly crystallized from benzene and a mixture of chloroform and methanol when colourless needles were obtained melting at 268°. Liebermann-Burchard test was positive and it gave the typical sequence of colours from yellow to purple on treatment with thionyl-chloride in the presence of tin indicating the compound to be triterpene. Acetylation with acetic anhydride and pyridine yielded an acetate which on crystallization from chloroform and methanol melted at 292–293°. On oxidation with chromic acid, it gave a ketone melting at 240–241°. From the physical constants and the various derivatives, the compound has been identified as taraxerol and confirmed by the mixed melting point with an authentic sample.

Thanks are due to Dr. V. Mahadevan, Head of the Animal Nutrition Division, for his kind interest and encouragement.

Division of Animal Nutrition, M. S. SASTRY.  
I.V.R.I., Izatnagar, June 13, 1966.

1. *The Wealth of India, Raw Materials*, Council of Scientific and Industrial Research, New Delhi, 1959, **5**, 74.

### OCCURRENCE OF *CLIBANARIUS ZEBRA* DANA (CRUSTACEA—DECAPODA) FROM THE INDIAN COAST

THIS short note is based on three specimens of Pagurids received for determination from the Western Regional Station, Zoological Survey of India, Poona. The material was collected during 1963 at Devged on the Arabian seacoast by Dr. B. K. Tikader. All the specimens were males and found inhabiting the molluscan shells of *Trochus radiatus* Gmelin. Length of carapace of the large specimen measured 10 mm.

The specimens possess subequal Chelipeds the right slightly larger and provided with white granule like tubercles. Walking legs have red longitudinal stripes. Dactylus is shorter than propodus, white in colour, with upper and lower red streaks. Except for a few minor characters, which are enumerated below, the specimens agree entirely with the description of *Clibanarius zebra* Dana 1852.