sternites a little longer than on metacoxae. Male protibiae (Text-fig. C) enlarged towards apex, distinctly curved and notched at base; basal three segments of protarsi and mesotarsi moderately enlarged; penis (Text-fig. B) slender, curved, asymmetrical from dorsal surface (rather twisted).

Female—unknown.

Remarks: This species belongs to the *irinus* group, Guignot (1961) and comes close to *C. bangalorensis* Vazirani, *C. indicus* Sharp and *C. freudei* Guignot; in coloration and elytral markings. It differs from all the above species in having elytral striae 1, 2 and 5 abridged at base as against elytral striae 1 abridged at base. In the shape of penis, which is without a dorsal lobe, it comes close to *C. indicus* and *C. freudei*, while in size it is larger than both of them. The specimen under report is freshly emerged, therefore the coloration described above is to be viewed accordingly. In mature specimens the coloration will be darker, but the basic pattern of markings will remain the same. The penis had protruded and had separated and was glued to the card along with the specimen. Vazirani (1970) has given key to the species known from India and has figured the genitalia of the other species mentioned above.

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CALCUTTA-16,
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REFERENCES

GUIGNOT, F. (1961): Revision des Hydrocanthares d' Afrique (Coleoptera Dytiscoidea). *Ann. Mus. R. Congo Belge Sci. Zool.* **90**: 659-995.

VAZIRANI, T. G. (1970): Contributions to the study of Aquatic Beetles (Coleoptera). VII. A. revision of Indian Colymbetinae (Dytiscidae). *Oriental Ins.* **4**: 303-362.

22. *QUISQUALIS INDICA* LINN. AND *DODONEA VISCOSA* LINN. AS NEW HOSTS OF CASTOR SEMILOOPER, *ACHOEA JANATA* LINN.

Castor semilooper, *Achoea janata* L. (Lepidoptera, Noctuidae) is a serious pest of Castor (*Ricinus communis*), guava fruits (*Psidium guajava*) (Srivastava 1960) and citrus fruits (Ayyar 1940 and Rakshpal 1945) in orchards, Pruthi & Mani (1945) reported rose (*Rosa indica*), pomegranate (*Punica granatum*) and *Euphorbia pilulifera* as the alternate hosts while Khan (1946) further included 'Kachnar' (*Bauhinia variegata*), 'Ber'

(*Zizyphus jujuba*), 'Dudhi' (*Euphorbia hirta*) and banyan (*Ficus bengalensis*) as the alternate hosts. The larvae were also observed, in forests, to feed on 'Babool' (*Acacia arabica*) and *Albizzia amara* by Bhasin & Roonwal (1954). The present report records the feeding of *A. janata* larvae on two additional hosts, namely the hedge plant *Dodonea viscosa* (Family Sapindaceae) and the ornamental Rangoon creeper, *Quisqualis indica* (Family Combretaceae). Both these plants are important garden ornamentals. So far, we have observed feeding of this pest in laboratory on more than a dozen hosts in varying degrees of intensity but observations made during the last two years at Jobner, Udaipur and Jaipur revealed that the two plants reported here suffer substantial damage by this insect from July onwards. Further, both *Quisqualis* and *Dodonea* were observed to be attacked in the field simultaneous to the occurrence of the insect on castor within a distance of 7 metres and 13 metres respectively. This showed that even in the presence of the primary host the gravid female moths oviposited on these garden plants indicating a potential preference of the insect to these plants. Detailed studies on the host preference of this insect are underway.

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REFERENCES

AYYAR, T. V. R. (1940) : A Handbook of Economic Entomology for South India. Madras Govt. Press, Madras, xviii+528 pp.

BHASIN, G. D. & ROONWAL, M. L. (1954) : A list of insect pests of forest plants in India and the adjacent countries. *Indian Forest Bulletin* (New Series) Entomology, No. 171 (1) : 1-93.

KHAN, M. Q. (1946) : Life history and bionomics of castor semiloopers in Hyderabad (Deccan). *Indian J. Ent.* **8** : 111-115.

PRUTHI, H. S. & MANI, M. S. (1945) : Our knowledge of the insect and mite pests of Citrus in India. Scientific Monograph, No. 16, I.C.A.R., Delhi. : **27** : 31-35.

RAKSHPAL, R. (1945) : Cirtus fruit sucking moths and their control. *Indian Fmg.* **6** : 441-443.

SRIVASTAVA, B. K. (1960) : *Achoea janata* as a pest of ripening guavas. Proc. 47th Indian Sci. Congress **3** : 558.