GRYPORHYNCHUS NYCTICORACIS YAMAGUTI, 1956 (DILEPIDIDAE ; CESTODA) AND *APHARYNGOSTRIGEA ARDEOLINA* VIDYARTHI, 1937 (STRIGEIDAE ; TREMATODA) FROM *ARDEA CINEREA JOUYI* CLARK

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Many fragmental cestodes and 51 trematodes were obtained from the small intestine of an Eastern grey heron *Ardea cinerea jouyi* CLARK captured at Hiroshima near Sapporo. The heron was dissected on October 11, 1965.

Gryporhynchus nycticoracis YAMAGUTI, 1956

Habitat Small intestine of *Ardea cinerea jouyi* CLARK

Locality Hiroshima, Hokkaido

Description Length of strobilae unknown. Only one scolex with a long neck was found. The hooks were desquamated; scolex 0.250 mm in diameter and 0.475 mm in length; rostellum 0.090×0.070 mm; suckers 0.120~0.150×0.090~0.125 mm. Proglottides campanulate with numerous calcareous corpuscles; mature proglottides broader than long, about 0.280 mm long by 0.330 mm wide; subgravid ones longer than broad, about 0.350 mm long by 0.320 mm wide; maximum width 0.390 mm. Genital pores unilateral, sinistral and pre-equatorial. Genital atrium wide, with two pouches situated one in front of, and one behind, the vaginal pore; each containing a pair of genital hooks, 0.035~0.040 mm long by 0.015 mm broad at the base. Testes 4 in number, very rarely 5, 0.050~0.060 mm in diameter, rounded, and grouped near posterior end of the proglottid. Vas deferens strongly convoluted at the anterior end of the proglottid. Cirrus pouch 0.070~0.090×0.042~0.055 mm, ellipsoid, containing fusiform cirrus and looped ductus ejaculatorius. Ovary transversly elongate at about the middle of the proglottid, bilobed with a slender isthmus, dextral lobe usually contains an incision. Size of ovary approximately 0.090 mm in diameter. Vitteline gland oval 0.045~0.050 mm in diameter, located behind the ovary. Receptaculum seminis ellipsoidal in mature proglottid, small in size 0.065~0.075×0.035 mm in subgravid proglottid. Mehlis gland situated between ovary and vitteline gland. Uterus bilobed with the lobes connected at anterior portion; dextral lobe larger than the sinistral, external

margin with constrictions; the dextral lobe sometimes stretches to anterior end of proglottid. Eggs not observed.

This species agrees with *Gryporhynchus nycticoracis* YAMAGUTI, 1956 reported from *Nycticorax nycticorax nycticorax* (L.), however, in the latter, descriptions of ovary and uterus were insufficient. Another species with 4 testes, *Gryporhynchus tetrorchis* HILL, 1941, differs from the presented species, especially in the size of the genital hooks.

Appendix The studied species is characteristic in the presence of the genital hooks. The development of the genital hooks was observed in the immature proglottides. Initially, several to a dozen minute hooks were found. Among them, two pairs developed to large hooks; the remainding hooks were desquamated and excreted.

Apharyngostrigea ardeolina VIDYARTHI, 1937

Habitat Small intestine of *Ardea cinerea jouyi* CLARK

Locality Hiroshima, Hokkaido

Description Body elongated showing curvature, 6.11～8.07 mm in length. Forebody 2.27～3.03 mm long by 1.01～1.38 mm wide; hindbody 3.82～5.04 mm long by 0.64～0.79 mm wide. Oral sucker 0.170～0.260×0.170～0.230 mm. No pharynx. Acetabulum cup-shaped, 0.230～0.380×0.260～0.340 mm. Tribocytic organ well-developed; anterior end of the dorsal lobe located at the level of posterior end of the oral sucker and that of the ventral lobe located at the level of the anterior region of the acetabulum. Proteolytic gland large, 0.500～0.730× 0.330～0.410 mm. Hindbody subcylindrical, being wide in the region of testes. Testes tandem, located in the posterior half of hindbody; constricted at median portion; the anterior testis 0.640～0.890 mm long, 0.500～0.730 mm thick and about 0.750 mm wide; the posterior testis 0.740～1.010 mm, 0.490～0.740 mm and 0.800 mm respectively. Each testis multilobed with many irregular indentations. Seminal vesicle convoluted behind posterior testis. Genital conus well-developed. Ovary rounded with some incisions, 0.240～0.360 mm long, 0.230～0.350 mm thick and 0.280～0.310 mm wide, its concavity directed postero-dorsad. Oviduct starts from concaved portion of ovary and was swollen between ovary and anterior testis, about 0.220 mm long by 0.110 mm wide. Ootype, shell gland and yolk reservoir in intertesticular area. Uterus extends from intertesticular area, anteriad along the midline and turns posteriad at anterior end of hindbody. Vitteline glands well-developed. Eggs oval, operculated, 0.080～0.110×0.045～0.070 mm.

The studied species is characteristic in size and the presence of a partial swelling of the oviduct. It, however, agrees with *A. ardeolina* VIDYARTHI, 1937 in various characteristics. ODENING (1962, 1963) considers *A. ardeolina* as a

synonym of *A. ramai* (VERMA, 1936). The author is of the opinion that *A. ardeolina* differs from *A. ramai* in the length of the body, proportion of length between hind- and forebody, and sizes of various organs especially the proteolytic gland.

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EXPLANATION OF PLATES

Plate I *Gryporhynchus nycticoracis* YAMAGUTI

Fig. 1 Mature proglottid

Fig. 2 Subgravid proglottid

Fig. 3 Scolex; rostellar hooks desquamated

Fig. 4 Genital hooks

Figs. 5~11 Development of genital hooks

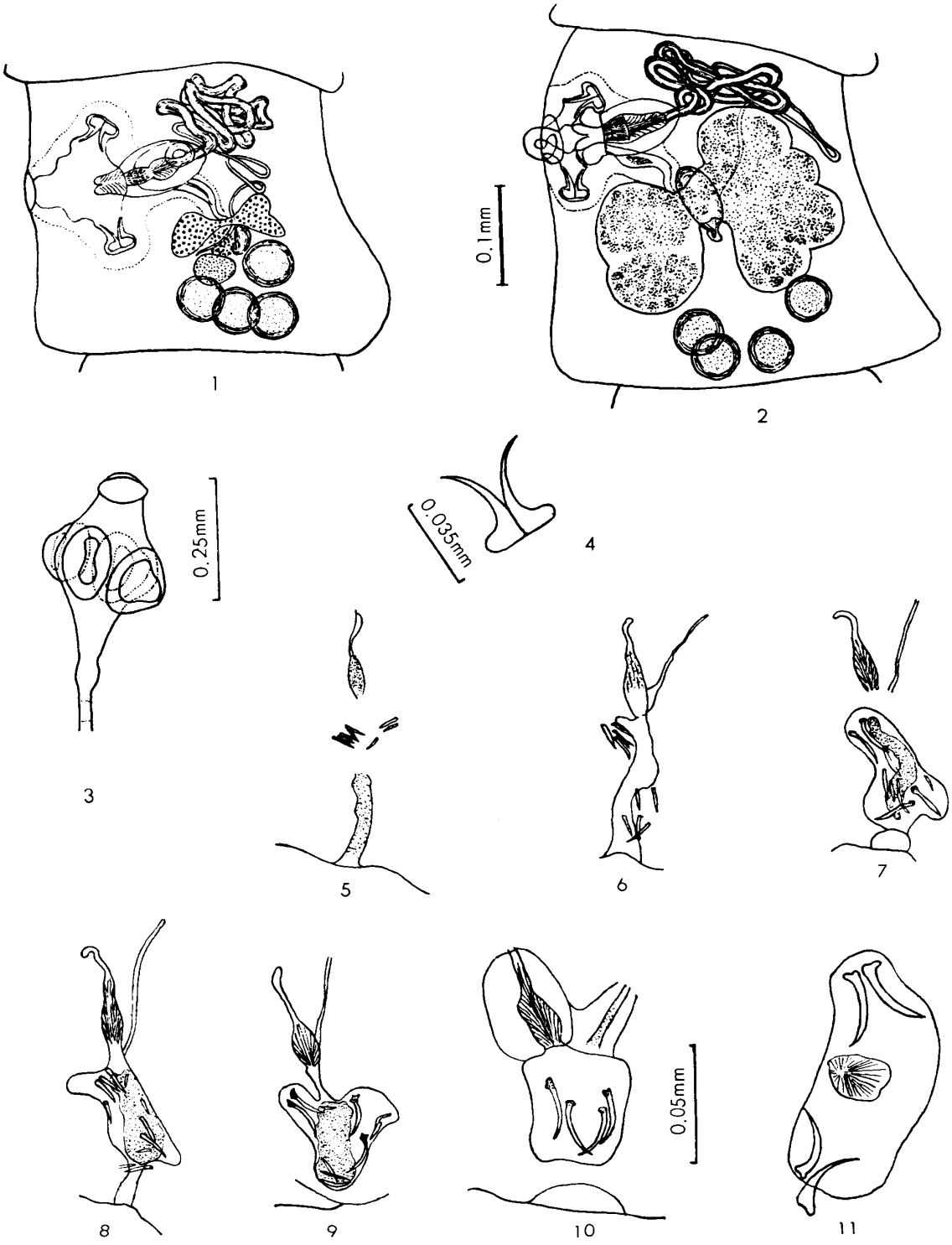
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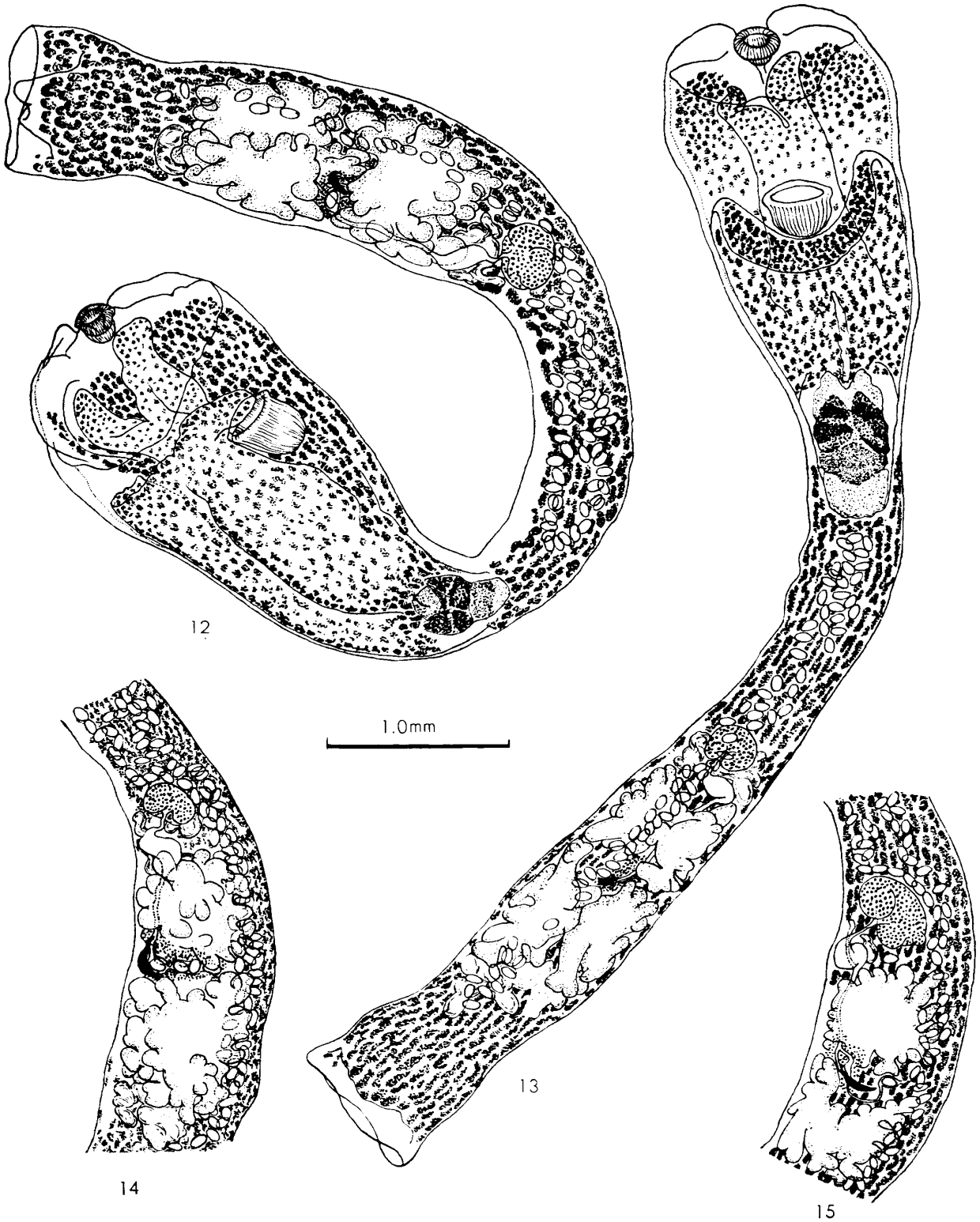
Plate II *Apharyngostrigea ardeolina* VIDYARTHI

Fig. 12 Subventral view

Fig. 13 Ventral view

Figs. 14 & 15 Details of gonads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