

Helminth records for the Madagascan giant day gecko, *Phelsuma grandis* (Gekkonidae) from Hawai‘i¹

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The Madagascan giant day gecko, *Phelsuma grandis* Gray is native to Madagascar (Henkel & Schmidt, 2000). This species was first collected in Hawai‘i in December 1996 in Mānoa Valley, O‘ahu where it was intentionally established (Kraus, 2002, as “*P. madagascariensis*”).

Between 1996 and 2008, 60 *P. grandis* were collected on O‘ahu, (mean snout-vent length, SVL = 87 mm ± 26.7 SD, range = 34–118 mm), fixed in 10% formalin then transferred to 70% ethanol for storage in the herpetology collection of the Bishop Museum (BPBM), Honolulu, Hawai‘i. The following specimens of *P. grandis* were loaned to SRG and examined at Whittier College, Whittier, California: BPBM 13285, 14089, 14092, 14756, 18226, 18227, 20990, 20999, 21000, 21138–21140, 21142, 21143, 21150, 21151, 23521, 23597, 23601–23603, 23917, 23918, 23975, 24106, 24107, 24110, 24112, 24123, 24217, 24710–24712, 24718, 25360, 25589, 27297, 28353–28357, 28361–28364, 28654–28663, 28665–28667, 31551. The gastrointestinal tract and lungs were removed and searched for helminths. Nematodes and pentastomes were placed in glycerol on glass slides, allowed to clear and examined under a light microscope. Voucher helminths were placed in vials of alcohol and deposited in the United States National Parasite Collection (USNPC), Beltsville, Maryland and the Bishop Museum, Honolulu (BPBM). The following species were found and are recorded below as new host records.

Cestoda: Linstowiidae

Oochoristica javaensis Kennedy, Killick
& Beverley-Burton

New host record

Oochoristica javaensis was originally described from the small intestines of geckos, *Gehyra mutilata*, *Hemidactylus platyurus*, and *H. frenatus* from Java, Indonesia (Kennedy *et al.*, 1982), and there is one report from Hawai‘i (*H. frenatus*; Goldberg & Bursey, 2000a). It is a wide-ranging species currently known only from lizards: a second report in *H. platyurus* from Indonesia (Matsuo & Oku, 2002); additional reports in *Gehyra mutilata* from Guam, Indonesia, and the Philippine Islands (Kugi, 1993; Goldberg *et al.*, 1998; Matsuo & Oku, 2002; Goldberg *et al.*, 2005); *Gehyra oceanica* from Guam and Oceania (Goldberg *et al.*, 1998; Goldberg & Bursey, 2002); additional reports in *H. frenatus* from Oceania, Philippines and Thailand (Hanley *et al.*, 1998; Goldberg & Bursey, 2001a, 2002); *Lepidodactylus pauwolepis* from the Marshall Islands (Goldberg & Bursey, 2002); *Mabuya carinata* from Bangladesh (Yesmin *et al.*, 2006) and *Sphenomorphus jobiensis* from Papua New Guinea (Bursey *et al.*, 2005). Criscione & Font (2001) reported *O. javaensis* in nonnative *Hemidactylus turcicus* collected in the southern United States and they experimentally infected nonnative *Hemi-*

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Pentastomida: Cephalobaenidae***Raillietiella frenatus* Ali, Riley & Self****New host record**

Raillietiella frenatus was originally described from the lungs of *Hemidactylus frenatus* collected in Malaysia by Ali *et al.* (1981), who reported it from the same host from the Philippine Islands, South Vietnam, Taiwan, and Thailand. *Raillietiella frenatus* was first reported in *H. frenatus* and *Lepidodactylus lugubris* from Hawai'i by Brown *et al.* (1995). Goldberg & Bursey (1997) provided a second report for *L. lugubris*. It was subsequently reported in both hosts by Hanley *et al.* (1998). Goldberg & Bursey (2000a) provided a third report for *H. frenatus* and a first report for *Anolis sagrei* (Goldberg & Bursey, 2000b). It is known only from lizard hosts, which include *Hemidactylus platyurus*, *Gehyra mutilata*, *Gekko monarchus*, *Japalura swinhonis*, and *Mabuya longicaudata* from Indonesia and Taiwan (Ali *et al.*, 1981; Matsuo & Oku, 2002). Prevalence: 19/60 (32%); mean intensity: 3.7 ± 3.5 SD: range 1–14, infection site: lung.

Material examined: O'AHU (BPBM H410; USNPC 101879).

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