

Oikos

OIK-00292

Kelehear, C., Brown, G. P. and Shine, R. 2013.
Invasive parasites in multiple invasive hosts: the
arrival of a new host revives a stalled prior parasite
invasion. – *Oikos* 000: 000–000.

Appendix 1

Kelehear, C., Brown, G. P. and Shine, R. Invasive parasites in multiple invasive hosts: the arrival of a new host revives a stalled prior parasite invasion. – *Oikos*.

Table A1. Literature review of recorded hosts and localities for the pentastomes *Raillietiella frenata* (= *frenatus*) and *Raillietiella indica*. Old taxonomic names are given in brackets.

Pentastome species	Host family	Host species	Location	Reference
<i>R. frenata</i>	Agamidae	<i>Japalura swinhonis</i>	Taiwan	(Self and Kuntz 1960 [*] , Ali et al. 1981)
(<i>R. frenatus</i>)	Bufo	<i>Rhinella marina</i> (<i>Bufo marinus</i>)	Australia	(Kelehear et al. 2011)
Ali et al. 1981	Gekkonidae	<i>Gekko monarchus</i>	Taiwan	(Self and Kuntz 1960 [*] , Ali et al. 1981)
		<i>Gehyra australis</i>	Australia	(Barton 2007 ^{**})
		<i>Gehyra mutilata</i>	Vietnam	(Dollfus and Canet 1954 ^{***} , Ali et al. 1981)
			Indonesia	(Matsuo and Oku 2002)
			Malaysia	(Ali and Riley 1983)
		<i>Hemidactylus frenatus</i>	Australia	(Barton 2007)
			Hawaii	(Brown et al. 1995 [†] , Hanley et al. 1998, Goldberg and Bursery 2000a)

* Self and Kuntz (1960) erected the species *R. hebitihamata* for type material from *H. frenatus* from Taiwan. They recorded the species from other hosts, also from Taiwan. Self and Garcia-Dias (1961) proposed this species as a junior synonym of *R. hemidactyli* Hett, 1934 but have not been followed. Ali et al. (1981) included the type material of *R. hebitihamata* in the list of specimens identifiable as their new species *R. frenata* (= *R. frenatus*) thereby making their own species a subjective junior synonym. The latter name remains in popular use but was synonymised with *R. hebitihamata* by Poore (2012).

** Account based on a single specimen collected in 1986

*** Ali et al. (1981) assigned the specimens from Vietnam identified by Dollfus and Canet (1954) as *R. hemidactyli* to *R. frenata* (= *R. frenatus*)

† Brown et al. (1995) give no justification for referring to their species as *Raillietiella hemidactyli*, Goldberg and Bursey (2000b) argue it to be *R. frenata* (= *R. frenatus*)

§ Evidence presented in Kelehear et al. (2011) suggests this species may be identical to *R. frenata* (= *R. frenatus*)

Supplementary references

- Ali, J. H. and Riley, J. 1983. Experimental life-cycle studies of *Raillietiella gehyrae* Bovien, 1927 and *Raillietiella frenatus* Ali, Riley and Self, 1981: pentastomid parasites of geckos utilizing insects as intermediate hosts. - Parasitology 86: 147-160.
- Ali, J. H. et al. 1981. A revision of the taxonomy of the blunt-hooked *Raillietiella*, pentastomid parasites of African, south-east Asian and Indonesian lizards, with a description of a new species. - Syst. Parasitol. 3: 193-207.
- Ali, J. H. et al. 1982. Amphibians as definitive hosts for pentastomids: *Raillietiella bufonis* n. sp. from *Bufo lemur* in Puerto Rico and a reassessment of *Raillietiella indica* Gedeonst, 1921. - Syst. Parasitol. 4: 279-284.

- Almeida, W. O. et al. 2008. Infection rates of pentastomids on lizards in urban habitats in the Brazilian northeast. - Braz. J. Biol. 68: 885-888.
- Anjos, L. A. et al. 2007. The alien and native pentastomids fauna of an exotic lizard population from Brazilian northeast. - Parasitol. Res. 101: 627-628.
- Anjos, L. A. et al. 2008. Pentastomids infecting an invader lizard, *Hemidactylus mabouia* (Gekkonidae) in northeastern Brazil. - Braz. J. Biol. 68: 611-615.
- Barton, D. P. 2007. Pentastomid parasites of the introduced Asian house gecko, *Hemidactylus frenatus* (Gekkonidae), in Australia. - Comp. Parasitol. 74: 254-259.
- Barton, D. P. and Riley, J. 2004. *Railletietiella indica* (Pentastomida) from the lungs of the giant toad *Bufo marinus* (Amphibia), in Hawaii, U.S.A. - Comp. Parasitol. 71: 251-254.
- Brown, S. G. et al. 1995. The parasitic theory of sexual reproduction: parasitism in unisexual and bisexual geckos. - Proc. R. Soc. B. 260: 317-320.
- Dollfus, R. P. and Canet, J. 1954. *Railletietiella (Heymonsia) hemidactyli* M. L. Hett 1934 suppose susceptible de parasiter l'homme consecutivement a l'ingestion thérapeutique de lézards vivants. - Bull. Soc. Pathol. Exot. 47: 401-407.
- Goldberg, S. R. and Bursley, C. R. 1997. New helminth records for the mourning gecko, *Lepidodactylus lugubris* (Gekkonidae) from Hawaii. - Bishop Mus. Occas. Pap. 49: 54-56.

- Goldberg, S. R. and Bursey, C. R. 2000a. Helminth records for the house gecko, *Hemidactylus frenatus* (Gekkonidae) from Hawaii. - Bishop Mus. Occas. Pap. 64: 56-59.
- Goldberg, S. R. and Bursey, C. R. 2000b. Transport of helminths to Hawaii via the brown anole, *Anolis sagrei* (Polychrotidae). - J. Parasitol. 86: 750-755.
- Goldberg, S. R. et al. 2010. Helminth records for the Madagascar giant day gecko, *Phelsuma grandis* (Gekkonidae) from Hawaii. - Bishop Mus. Occas. Pap. 108: 49-52.
- Goldberg, S. R. et al. 2005. Metazoan endoparasites of four species of lizards, *Gehyra mutilata*, *Hemidactylus frenatus* (Gekkonidae), *Mabuya cumingi*, *Mabuya multifasciata* (Scincidae), and one species of snake, *Ramphotyphlops braminus* (Typhlopidae), from the Philippine Islands. - Comp. Parasitol. 72: 88-101.
- Hanley, K. A. et al. 1998. An experimental investigation of the competitive displacement of a native gecko by an invading gecko: no role for parasites. - Oecologia 115: 196-205.
- Kelehear, C. et al. 2011. Using combined morphological, allometric and molecular approaches to identify species of the genus *Raillietiella* (Pentastomida). - PLoS ONE 6: e24936.
- Matsuo, K. and Oku, Y. 2002. Endoparasites of three species of house geckoes in Lampung, Indonesia. - J. Helminthol. 76: 53-57.
- Pence, D. B. and Selcer, K. W. 1988. Effects of pentastome infection on reproduction in a southern Texas population of the Mediterranean gecko, *Hemidactylus turcicus*. - Copeia 1988: 565-572.

- Poore, G. C. B. 2012. The nomenclature of the Recent Pentastomida (Crustacea), with a list of species and available names. - Syst. Parasitol. 82: 211-240.
- Self, J. T. and Garcia-Diaz, J. 1961. *Raillietiella (Heymonsia) hemidactyli* Hett, 1934, from *Hemidactylus mabouia* in Puerto Rico, with a correction of the identity of *R. hebitithamata* Self and Kuntz, 1960. - J. Parasitol. 47: 912.
- Self, J. T. and Kuntz, R. E. 1960. Pentastomida from reptiles of Lan Yü Island (Taiwan), with a description of *Raillietiella hebitithamata* n. sp. - J. Parasitol. 46: 885-887.