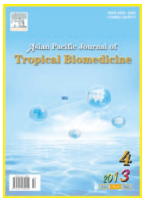
Contents lists available at ScienceDirect

Asian Pacific Journal of Tropical Biomedicine

journal homepage: www.elsevier.com/locate/apjtb



Document heading doi:

Discovery of *Trichuris landak* n. sp. by Endang Purwaningsih

Lim Boon Huat

Biomedicine Programme, School of Health Sciences, Universiti Sains Malaysia, 16150 Kubang Kerian, Kelantan, Malaysia.

Dear Editor,

I wish to congratulate Endang Purwaningsih for publishing in Asian Pacific Journal of Tropical Biomedicine (APJTB) the important discovery of *Trichuris landak* n. sp., a new species of whipworm that parasitizes porcupine in Indonesia. The author separated the new species from the other *Trichuris* spp. by comparing the morphologic features and morphometric measurements of the adult worms. Similar approach was reported by Robles *et al.* in the discovery of *Trichuris navonae* n. sp. from forest-dwelling mice in Argentina[1].

Trichuris spp. are relatively host specific in nature; for instance *Trichuris trichiura* infects human and *Trichuris suis* infects pigs. However, Ravasi *et al.* revealed that two distinct *Trichuris* genotypes were found to infect both humans and non-human primates in South Africa[2]; and *Trichuris vulpis*, a common canine whipworm was found in a sick Mexican child[3]. Hence, the potential threat of other *Trichuris* spp., such as *Trichuris landak* to human population is a health concern especially among rural folks whose environment is surrounded by zoonotic hosts.

I agree with Endang in his general comment that molecular analytical tools should be utilized in future studies to improve the speciation of *Trichuris* spp. This is due to the inherently limited number of unique external morphological features on the adult worms[4-6]. Accurate information on the possible zoonotic behaviour of different *Trichuris* spp. is pertinent for health workers to improve on the existing control measures, since the infection still afflicts ~600 million people of the world population. Hopefully, more funding will be made available for more molecular phylogenetic studies on *Trichuris* spp., which will inevitably contribute to our knowledge on the etiology of human trichuriasis.

Conflict of interest statement

I declare that I have no conflict of interest.

References

[1] Robles MDR. New species of *Trichuris* (Nematoda: Trichuridae) from *Akodon montensis* Thomas, 1913, of the Paranaense Forest in Argentina. *J Parasitol* 2011; **97**(2): 319-327.

[2] Ravasi DF, O'Riain MJ, Davids F, Illing N. Phylogenetic evidence that two distinct *Trichuris* genotypes infect both humans and non-human primates. *PLoS ONE* 2012; **7**(8): e44187.

[3] Adrian Márquez-Navarro A, Gudelio García-Bracamontes G, Álvarez-Fernández BE, Ávila-Caballero LP, Santos-Aranda I, Díaz-Chiguer DL, et al. *Trichuris vulpis* (Froelich, 1789) infection in a child: A case report. *Korean J Parasitol* 2012; **50**(1): 69-71.

[4] Criscione CD, Poulin R, Blouin MS. Molecular ecology of parasites: elucidating ecological and microevolutionary processes. *Mol Ecol* 2005; **14**: 2247-2257.

[5] Cutillas C, Callejo´n R, De Rojas M, Tewes B, Ubeda JM, Ariza C, et al. *Trichuris suis* and *Trichuris trichiura* are different nematode species. *Acta Trop* 2009; **111**: 299-307.

[6] Nissen S, Al-Jubury A, Hansen TVA, Olsen A, Christensen H, Thamsborg SM, et al. Genetic analysis of *Trichuris suis* and *Trichuris trichiura* recovered from humans and pigs in a sympatric setting in Uganda. *Vet Parasitol* 2012; **188**(1-2): 68-77.

*Corresponding author: Lim Boon Huat (PhD), Biomedicine Programme, School of Health Sciences, Universiti Sains Malaysia, 16150 Kubang Kerian, Kelantan, Malaysia.
Email: limbh@kb.usm.my

Article history:
Received 7 Feb 2013
Received in revised form 21 Feb, 2nd revised form 27 Feb, 3rd revised form 15 Mar 2013
Accepted 25 Mar 2013
Available online 28 Apr 2013