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Yeomansus: A New Genus for the Slender Racer (Serpentes:Colubridae).

Raymond T. Hoser

488 Park Road, Park Orchards, Victoria, 3134, Australia.

Phone: +61 3 9812 3322 Fax: 9812 3355 E-mail: viper007@live.com.au
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ABSTRACT

The Slender Racer from drier parts of central Asia was originally described as "Masticophis spinalis" by Peters in 1866. It has had an unstable taxonomic history having being shunted between genera, including Zamenis by Jan in 1866, Coluber by Slevin in 1925 and then Hierophis by Schätti in 1988.

However phylogenetic studies by Nagy et. al. (2004) and more recently Pyron et. al. (2011), using molecular methods have confirmed that this species is placed between the genera *Hierophis* Fitzinger 1834 and *Eirenis* Jan, 1863.

Furthermore this taxon shows a deep divergence from the other two groups.

Because of this situation and the fact that it is not tenable to merge *Hierophis* and *Eirenis*, a new monotypic genus, *Yeomansus* gen. nov. is created for the species "*Masticophis spinalis*" according to the Zoological Code.

The facts and circumstances leading to the avoidable death of United Kingdom snake expert Luke Yeomans on 29 June 2011 are also given.

Keywords: Taxonomic revision; new genus; *Yeomansus*; *Hierophis*; *Eirenis*; systematics; venomoid.

INTRODUCTION

The racers, formerly placed in the genus *Coluber* (sesu lato) have been the subject of intense taxonomic scrutiny in recent years (Ananjeva et. al. 2006, Nagy et. al. 2004a, 2004b, Pyron et. al. 2011).

Using both morphological and molecular methods, relationships between most species have been resolved and where necessary genera have been resurrected from synonymy with *Coluber*, or new ones created.

The species described as "Masticophis spinalis" by Peters in 1866, commonly known as the "Slender Racer" is one of the species whose phylogeny has been well established by molecular means by numerous studies including those of Nagy et al. (2004a, 2004b) and Pyron et. al. (2011).

After being shunted between genera *Zamenis* by Jan in 1866, *Coluber* by Slevin in 1925 and then *Hierophis* by Schätti in 1988, Nagy et. al. presented evidence to suggest that the species should be placed in the genus *Eirenis* Jan, 1863, with the view being widely adopted by others including the influential (but commonly inaccurate) website "Wikipedia" as of January 2012. Molecular phylogenies produced by Pyron et. al. (2011) and others show the Slender Racer sits between both *Hierophis* and

Eirenis and is not particularly close to either group.

Until now and in light of this knowledge, herpetologists have tended to shunt this species between either genus, with no strong consensus developing as to which is the correct one.

The reality is that short of merging *Hierophis* and *Eirenis* no consensus is likely to occur. However a viable solution to the problem and a means of creating taxonomic stability is to erect a third genus to accommodate this taxon.

Doing so would remove the need to decide where to allocate this species and would also more accurately reflect the relationship of this taxon to the other two groups.

As such a move (to erect a genus) for the Slender Racer is inevitable, it is better done sooner rather than later and is therefore done here according to the Zoological Code (Ride et. al. 1999).

There is no need to formally define the genera *Hierophis* and *Eirenis* as this is done elsewhere, although in the diagnosis below for the new genus *Yeomansus* gen. nov., the diagnosis does explain how to separate the relevant taxon from the other species.

While found in a region remote from Western Europe and North America, there has been plenty of material published in relation

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to the Slender Racer, and it is well-known to science.

Important publications include. Ananieva et. al. (2006). Bauer et. al. (1995), Boulenger (1893), Dujsebayeva (2010), Günther (1872), Jan (1866, 1867), Kharin (2011), Kharin and Akulenko (2008), Macey et. al. (1988), Mell (1931), Nagy et. al. (2004a, 2004b), Peters (1866), Pyron et. al. (2011), Schätti (1988), Schätti and Wilson (1986), Shannon (1956), Slevin (1925), Stejneger (1907), Xu et. al. (2000), and Zhao and Adler (1993). While there is often an inertia by herpetologists to adopt usage of a new name for a genus, especially a monotypic one, this is unlikely to be the case for the taxon placed in this new genus for two reasons: 1/ due to the history of the nomenclature for the species and current confusion as to the generic allocation meaning people will be looking for a current and if need be new genus for the taxon, and 2/ I have decided to name the genus after a very popular and charismatic reptile expert from the UK, Luke Yeomans, allowing people to identify a snake with someone they already know of, making memorizing the new name easy.

GENUS YEOMANSUS GEN. NOV.

Type species: Masticophis spinalis Peters, 1866.

Diagnosis: This genus is monotypic for the type species spinalis. It is separated from all other snakes within genera Coluber, Zamenis, Hierophis and Eirenis by the following suite of characters: The snout is prominent and fairly pointed. The rostral is nearly as deep as it is broad, the portion visible from above measuring one third to two fifths its distance from the frontal: internasals shorter than the prefrontals; frontal broader than the supraocular, one and a half times as long as it is broad, a bit longer than its distance from the end of the snout, as long as the parietals; loreal longer than deep; one preocular, separated from or just touching the frontal, with a small subocular below it; two postoculars; temporals usually 1+2, 2+2 or 2+3; eight (sometimes nine) supralabials, numbers 4-5 or 5-6 entering the eve: five lower labials in contact with the anterior chin shields; posterior chin shields are as long as or slightly longer than the anterior and separated from each other by small scales. Scales are smooth with 17 dorsal mid-body rows. The 180-203 ventrals are very indistinctly angulate laterally, anal is divided and there are 85-99 subcaudals.

The snake's colour is pale olive-brown above; a distinct yellow dark-edged vertebral streak commencing on the frontal shield; posterior part of body has several longitudinal streaks, labials, preoculars and postoculars are yellow; the lower parts are yellow, with a blackish streak or series of blackish spots along the outer edge of the shields. The hemipenis is calcylate and there are no enlarged basal spines on the hemipenis.

Adults attain a metre in length, and as per the common name these are slender fast-moving diurnal snakes.

Distribution: Found in a broad region stretching from South Korea to east Kazakhstan, including Russia (Siberia), Mongolia and northern China. It is most commonly caught in drier habitats with loose rocks at ground level and some vegetation.

Etymology: Named in honour of Luke Yeomans, a well-known British Herpetologist, who died prematurely from a King Cobra bite at his UK facility on 29 June 2011.

His contributions to herpetology are numerous and include his pioneering work in breeding the Irian Jaya Dwarf Mulga Snake (*Pailsus rossignollii*) in the decade following my formal description of the taxa in 2000 (Hoser 2000). The results of his breedings are expected to appear in a book about keeping and breeding Australasian elapid snakes by Scott Eipper later in 2012.

Besides being an extremely passionate and skilled herpetologist, Yeomans was also a wonderful human being who never lost sight of the beauty of the reptiles he loved so dearly.

However it is the things that went wrong during his life that should be highlighted as a warning to other potential herpetologists in future generations.

Yeomans first came to my attention in the early 1990's after he was prosecuted for the heinous crime of feeding live food to a reptile.

For this mortal sin, he was dragged through Britain's criminal courts, prosecuted, convicted and fined. Then he was held up

for public hatred in Britain's notorious tabloid media.

The legal precedent now sits as a threat and if need be, a means to criminally charge any other reptile keeper who dares use live food for any reptiles, including such humble items as mealworms or crickets and then upsets anyone in a government authority.

Yeomans said he was originally "dobbed in" by another reptile person, Mark O'Shea, whom he said had an axe to grind against him. The relevant authority in this case, the RSPCA in the UK, ran the prosecution.

I wrote about the case in the book "Smuggled: The Underground Trade In Australia's Wildlife", (Hoser, 1993), and unexpectedly met Yeomans in person at the Orlando Reptile Expo in the United States

That was in 1993, when the League of Florida Herpetological Societies invited me there to give a talk about Australia's own draconian wildlife law enforcement.

As inferred already, it was the personality of Yeomans that impressed me rather than his herpetological skills, noting that in Orlando, I didn't get to see Yeomans working with reptiles!

My next contact with Yeomans was in the period postdating my description of the Irian Jaya Dwarf Mulga Snake in 2000 and him wanting to breed them in captivity. Ultimately he did this.

Beyond that, the next conversations related to the issue of safety for himself in his own reptile shows that he intended doing at a "King Cobra Sanctuary" he was planning to open in the UK in mid 2011.

In this, I specifically mean the use of venomoid snakes as described by Hoser (2004).

These are snakes that have had their venom glands surgically removed in a virtually painless operation and where the snakes get to keep their fangs and are as far as they are concerned "normal".

Yeomans had seen how in the previous 6 years myself and ten staff had done over 10,000 venomous snake shows with the world's five deadliest snakes and without any fatal or near fatal snakebites.

He had seen videos of myself taking bites from the snakes to prove they were safe and was well aware of the benefits of the venomoid snakes, not just for the safety aspect, but also the welfare of the snakes.

In fact Yeomans himself had previously owned a venomoid cobra!

Yeomans toyed with the idea of making all his large King Cobras venomoid because he feared that sooner or later he'd make a handling error and get bitten. However he decided against doing so and the reason for this is important.

He had no issues with the surgery and the false claims of cruelty to the snakes. In fact in terms of the venomoid snakes, there was no sensible reason for him not to get them except for one.

That reason was the expected attacks he would get from Mark O'Shea, a man he described as his sworn enemy, and Wolfgang Wüster, both within the reptile fraternity and both of the UK and both of whom had been key sponsors of an anti-Hoser and anti-venomoid petition website, run by a convicted wildlife smuggler, David John Williams and his close friend Shane Hunter in Australia.

Yeomans was in extreme fear that should O'Shea or Wüster become aware of him having venomoid snakes, that they would attack and undermine his reptile display business and worse still have him targeted by the RSPCA again.

With one "animal cruelty" conviction already, Yeomans decided the likelihood of attacks and another more serious conviction would terminally disable his business and so he decided instead to take the risk of keeping his snakes that he handled for shows "hot".

Besides the phone calls we had, Yeomans also sent numerous e-mails complaining about the reckless conduct of Mark O'Shea and his friend Wolfgang Wüster in terms of himself, even detailing how O'Shea had improperly had him expelled from the International Herpetological Society.

Yeomans made countless comments about O'Shea in particular, whom he described as being a cross between a rat and a dog.

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He said O'Shea was physically like a rat, as in small, bony and hairy and like a Shitzu dog in that he constantly "yapped", "shits you" and never shuts up.

I could devote several pages to the adverse comments made by Yeomans about O'Shea, Wüster and their unethical behaviour, but these are not particularly relevant beyond what has already been told in terms of how they made Yeomans choose not to protect himself with venomoid Cobras.

On 29 June 2011, Yeomans made the snake handling error that cost him his life.

Just days before his "King Cobra Sanctuary" was due to open, one of his "hot" snakes bit him and he died.

At just 47 years of age a herpetologist in the prime of his career was killed.

If Luke Yeomans had not been forced by these other so-called "herpetologists" to put his life at unnecessary risk with snakes that could easily have been devenomized, he would still be breeding rare and endangered reptiles and educating people at his new "King Cobra Sanctuary".

Much has been made in recent years of the threats to private individuals and their rights to be allowed to keep and study reptiles. The alleged threat is often identified as coming from outside the herpetological community. The usual bogeyman identified are militant animal rights groups and the like.

They are not the real enemy.

These people lack expertise in reptiles and do not carry any political or legal power in terms of reptiles and the law. Put simply, no one takes them seriously. By contrast the real enemy is within the reptile community. The reckless conduct of O'Shea and Wüster were in effect directly responsible for the premature death of Yeomans. Here in Australia, in 2011 and 2012, my family, my business, my friends and staff have been subjected to numerous armed raids, criminal charges and the like designed to destroy the Snakebusters business.

While the raids, criminal charges and the like have been conducted by (in this case) very corrupt government wildlife officers under the control of the corrupt and hateful Glenn Sharp of the Victorian Government Wildlife Department (DSE), the whole series of actions were in fact initiated by people within the reptile fraternity. In our case the enemy was a group of newly established "reptile businesses", which included former employees of the government run zoo, part of the same department that regulates us.

Because they couldn't match the standards of Snakebusters, they simply used their powers to unlawfully close us down!

By naming a snake genus after Luke Yeomans, it is hoped that people who look into the etymology of the name, familiarize themselves with the story of his totally avoidable and premature death and see who are the culpable people who not only made his life at times unbearable in life, but also effectively brought it to a premature abrupt end.

It's hoped that people realise that the enemies of herpetology are more likely to be within the reptile community rather than outside.

REFERENCES CITED

Ananjeva, N. B., Orlov, N.L., Khalikov, R. G., Darevsky, I. S., Ryabov, I. S. and Barabanov, A. V. 2006. *The Reptiles of North Eurasia. Taxonomic Diversity, Distribution, Conservation.*Pensoft Series Faunistica 47:250 pp.

Bauer, A. M., Günther, R. and Klipfel, M. 1995. *The herpetological contributions of Wilhelm C. H. Peters (1815-1883).* SSAR Facsimile Reprints in Herpetology:714 pp.

Boulenger, G. A. 1893. Catalogue of the snakes in the British Museum (Nat. Hist.) I. London (Taylor and Francis):448 pp. Dujsebayeva, T. N. (ed.) 2010. Short review of last changes in the checklist of amphibians and reptiles of Kazakhstan. In: Dujsebayeva, T. N. (ed.) Herpetological Researches in Kazakhstan and adjacent countries. Almaty: ACBK - KBCU:260 pp. (p. 37-52).

Günther, A. 1872. Seventh account of new species of snakes in the collection of the British Museum. *Ann. Mag. Nat. Hist.* (4)9:13-37.

Hoser, R. T. 1993. Smuggled: The Underground Trade in Australia's Wildlife, Apollo Publishing, Moss Vale, NSW, Australia:159 pp.

Hoser, R. T. 2000. A new species of snake (Serpentes: Elapidae) from Irian Jaya, *Litteratura Serpentium* 20(6):178-186.

Hoser, R. T. 2004. Surgical Removal of Venom Glands in Australian Elapids:The creation of Venomoids. *The Herptile* 29(1):37-52.

Jan, G. 1866. Nouv. Arch. Mus. Paris ii:7

Jan, G. 1867. *Iconographie générale des ophidiens. 23. Livraison.* J.B. Bailière et Fils, Paris.

Kharin, V. E. 2011. Annotated catalogue of amphibians and reptiles (Amphibia, Reptilia) of the Far-Eastern Marine Biosphere FEB RAS. *Biodiversity and Environment of Far East Reserves*, Vladivostok, DVMBGPZ DVO RAN 2011(1):30-48.

Kharin, V. E. and Akulenko, M. V. 2008. Rare and little-known snakes of North-Eastern Eurasia. 1. A new record of *Hierophis spinalis* (Colubridae) from Russian Far East. *Current Studies in Herpetology* 8(2):160-169.

Macey, J. R., Papenfuss, T. J. and Zhao, E. 1988. The snakes of Ningxia Hui autonomous region as an indication of a herpetofaunal corridor. *Chinese Herp. Research* 2(1):4-5.

Mell, R. 1931. List of Chinese snakes. Lingnan Sci. Jour., Canton 8[1929]:199-219.

Nagy et. al. (2004a) (AKA Nagy, Z. T., Lawson, R., Joger, R. and Wink, M. 2004). Molecular systematics of racers, whipsnakes and relatives (Reptilia: Colubridae) using mitochondrial and nuclear markers. *Journal of Zoological Systematics and Evolutionary Research* 42(3):223-233.

Nagy et. al. (2004b) (AKA Nagy, Z. T., Schmidtler, J. F., Joger, U. and Wink, M. 2004). Systematik der Zwergnattern (Reptilia: Colubridae: Eirenis) und verwandter Gruppen anhand von DNA-Sequenzen und morphologischen Daten. *Salamandra* 39(3/4):149-168

Peters, W. C. H. 1866. Mittheilung über neue Amphibien (Amphibolurus, Lygosoma, Cyclodus, Masticophis, Crotaphopeltis) und Fische (Diagramma, Hapalogenys) des Kgl. Zoologischen Museums. *Monatsber. Königl. Preuss. Akad. Wissensch.* Berlin 1866:86-96.

Pyron, R. A., et. al. 2010. The phylogeny of advanced snakes (Colubroidea), with discovery of a new subfamily and comparison of support methods for likelihood trees. *Mol. Phylogenet. Evol.* 58:329-342.

Ride, W. D. L. (ed.) et. al. (on behalf of the International Commission on Zoological Nomenclature) 1999. *International code of Zoological Nomenclature*. The Natural History Museum, Cromwell Road, London SW7 5BD, UK.

Schätti, B. and Wilson, L. D. 1986. *Coluber* Linnaeus. Holarctic racers. *Catalogue of American Amphibians and Reptiles* 399(1986):1-4.

Schätti, B. 1988. *Systematik und Evolution der Schlangengattung* Hierophis *Fitzinger, 1843.* PhD Diss. Univ. Zürich 1988.

Shannon, F.A. 1956. The reptiles and amphibians of Korea. *Herpetologica* 12(1):22-49.

Slevin, J. R. 1925. Contributions to Oriental herpetology. II. Korea or Chosen. *Proc. Cal. Acad. Sci.* (4)14(5):89-100.

Stejneger, L. H. 1907. Herpetology of Japan and adjacent territory. *Bull. US Natl. Mus.* 58: xx, 1-577.

Xu X., Huang, J., Zhang, L. and Zhang, M. 2000. *Coluber spinalis*, a record new to Anhui Province. Sichuan. *Journal of Zoology* 19(3).

Zhao, E. and Adler, K. 1993. *Herpetology of China*. SSAR, Oxford/Ohio:522 pp.