

A Division of the Patch-nosed Snakes, genus *Salvadora* Baird and Girard, 1853 (Serpentes: Colubridae: Colubrinae).

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 Patch-nosed Snakes placed within the genus *Salvadora* Baird and Girard, 1853 have had a stable taxonomic history at the genus level since the genus was first named in 1853. However the division of the genus into two distinctive lineages has been well known for many years (Smith, 1938).

A review of these snakes yields a need to divide the genus.

Salvadora Baird and Girard, 1853 retains, *Salvadora bairdi* Jan, 1860, *Salvadora grahamiae* Baird and Girard, 1853, *Salvadora hexalepis* (Cope, 1867), *Salvadora deserticola* Schmidt, 1940 and *Salvadora intermedia* Hartweg, 1940.

A new genus *Aiselfakharius* gen. nov. is erected to contain the species *Salvadora lemniscata* (Cope, 1895) and *Salvadora mexicana* (Duméril, Bibron and Duméril, 1854) according to the Zoological Code.

The latter genus is most easily separated from the former by its higher subcaudal count (121-139 versus 82-103), one preocular (versus two or more) and an unenlarged rostral (versus one that usually is).

Keywords: Patch-nosed Snake; Taxonomy; *Aiselfakharius*; *Salvadora*; new genus.

INTRODUCTION

The Patch-nosed Snakes are sometimes recognized by their greatly enlarged or over-sized rostral scale that protrudes somewhat and is commonly indented in the middle like a digging shovel. This assists the snakes when digging in sand in search for reptile eggs and other food items.

The seven currently recognized species within the genus as currently understood and placed within the genus *Salvadora* Baird and Girard, 1853 have had a stable taxonomic history at the genus level since the genus was first named in 1853. In 1960 Cope proposed the name *Phimothyra*, but used the species *grahamiae* as the type for his genus. This is the same type species as used for the genus *Salvadora* Baird and Girard, 1853, meaning the Cope name disappears into synonymy with *Salvadora*.

As inferred already, not all snakes in the genus have the greatly enlarged rostral scale that gives the genus its name.

Two species in particular, namely *Salvadora lemniscata* (Cope,

1895) and *Salvadora mexicana* (Duméril, Bibron and Duméril, 1854) do not have this modified rostral and are thought to be primitive to the other species. The more elongate tail also confirms the casual observations by snake catchers that these species are not as fossorial as the others within the genus as currently understood.

As mentioned in the abstract, these differences and/or others are regarded as being sufficient to warrant division of the genus as currently understood into two, which is done herein according to the Zoological Code (Ride et. al. 1999).

I am not averse to dividing genera into subgenera, but in this case the division is so large and consistent that I cannot sustain an argument in favour of a more conservative position.

Being native to north and central America, these snake are well-known, even if rarely kept in captivity as compared to other locally occurring species.

Important papers in terms of *Salvadora* as recognized to date include Baird and Girard (1853), Bogert (1939, 1945), Bogert and Degenhardt (1961), Boulenger (1893), Cameron and Hansen (1994), Christman et. al. (1998), Conant (1942), Conant and Collins (1991), Cope (1867, 1879, 1895), Davis and Dixon (1957), Degenhardt et. al. (1956), Dixon (2000), Dixon and Lemos-Espinal (2010), Duméril et. al. (1854), Flesch et. al. (2010), Gelbach and Collette (1957), Hall (1951), Hartweg (1940), Husak and Wright (1998), Jadin and García-Vázquez (2008), Jan (1860), Leviton and Banta (1964), Liner (2007), Martin (1958), McCranie and Wilson (2001), Schmidt (1940), Schmidt and Shannon (1947), Smith (1938, 1941), Smith and Smith (1976), Smith and Taylor (1945), Stebbins (1985), Taggart et. al. (1994), Tanner (1954), Taylor (1938), Van Denburgh (1895), Vázquez Díaz and Quintero Díaz (2005) and Wright and Wright (1957).

GENUS AISELFAKHARIUS GEN. NOV.

Type species: *Zamenis mexicanus* Duméril, Bibron and Duméril, 1854

Diagnosis: Wright and Wright (1957) give an excellent diagnosis of the genus *Salvadora* as recognized to date. This is provided herein, slightly altered as part of the diagnosis for the new genus *Aiselfakharius* gen. nov..

The snakes of the genus *Salvadora* as recognized to date are medium in size, up to 120 cm long, with a long slender body that tapers and with a tail that is 18 to 34 percent of the total length (see below), the head is elongate and distinct. Cephalic plates are normal except for the rostral which is usually thickened, widened, triangular and curved back over the snout in all forms except for those now placed in the genus *Aiselfakharius* gen. nov.. Loreal is single or divided, one pre-ocular in *Aiselfakharius* gen. nov. versus 2 or more in *Salvadora*. Postoculars 2-3, suboculars sometimes present, supralabials usually 8-10, infralabials usually 8-12, with anywhere from none to 3 contacting the eye (see below). The second pair of chin shields are in contact or separated by as many as 3 small scales, eye is large with a round pupil above labials 4-7, scales are smooth with indistinct apical pits in 17-19 dorsal mid-body rows, 9-17 +3 maxillary teeth, the hemipenis is non-capitate, without bifurcation, with apical calyces, single sulcus and long basal spines.

The genus *Aiselfakharius* gen. nov. is easily separated from *Salvadora* by the following characters: one preocular (instead of two or more), the tail is 30 per cent of the total length or more (versus less than 30 per cent in *Salvadora*), 121-139 subcaudals (versus 82-103 in *Salvadora*), 3 supralabials enter the eye (versus no more than two entering the eye in *Salvadora*), the rostral is not greatly enlarged (as is the case in *Salvadora*).

The dorsal body pattern in *Aiselfakharius* gen. nov. may be either striped or speckled (usually striped) and if there is speckling it is typically on the anterior third of the body.

Distribution: Mexico and the region south including Guatemala.

Etymology: *Aiselfakharius* gen. nov. is named in recognition of the Akram Elfakhri of Northcote, Melbourne, Victoria, Australia, known to his friends and family as "Ace". The scientific name has been deliberately spelt in a manner in order to sound the same as he is known, but spelt so as to be naturally said as spelt and without difficulty by those unaware of the intention of the name.

Ace is herein recognized for numerous services to the Victorian Taxi Industry and for extremely brave efforts in fighting corruption within the Victorian Taxi Directorate (VTD) and predecessor Vicroads in the 1980's and 1990's including against corrupt VTD lawyers Terry O'Keefe, David Robby and John Connell, and their army of corrupt and dishonest "enforcement officers", better described as violent thugs, who broke every conceivable rule, including George Olsen, Roger Bowman, John Brentnall, John Perry, Len Hodgins, Gordon Alliston, Geoffrey Goodson, Derry Ashton, Andrew Pingo and Arnold Howard (see Hoser 1995 and Hoser 1999 for details).

Content of *Aiselfakharius* gen. nov.

Aiselfakharius mexicana (Duméril, Bibron and Duméril, 1854)(Type species).

Aiselfakharius lemniscata (Cope, 1895).

Content of *Salvadora* Baird and Girard, 1853

Salvadora grahamiae Baird and Girard, 1853 (Type species).

Salvadora bairdi Jan, 1860.

Salvadora hexalepis (Cope, 1867).

Salvadora deserticola Schmidt, 1940.

Salvadora intermedia Hartweg, 1940.

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