



## *Streptostele musaecola* (Morelet, 1860)

FAMILY STREPTAXIDAE

**Current Risk Status in Fiji:**  
Medium - High

**Body Type:**  
Snail with well developed elongate shell

**Size:**  
< 9 mm in shell height



**Source of photograph:**

Robinson *et al.* 2009 via

[http://en.wikipedia.org/wiki/Streptostele\\_musaecola](http://en.wikipedia.org/wiki/Streptostele_musaecola)

Also reported to have been introduced to Australia (Robinson *et al.* 2009), American Samoa (Cowie 2001a & b), Vanuatu and French Polynesia (Solem 1988).

### Description & Distribution

#### Description

The body of a living *Streptostele musaecola* is red (Stanisic 1998). The shell is small (generally 4-7 mm in height) and elongate with strong radial ribs which are prominent on the seven whorls (Solem 1988). The shell aperture has quite a distinct curvature to the upper section of the expanded and thickened outer lip. There are no aperture “teeth” or barriers present. The shell when unoccupied or freshly empty is colourless but it may be come “chalky white” with age once empty.

#### Distribution

Members of this family are common in Africa, South America and mainland Asia (Stanisic 1998). Over ninety genera and six hundred species are known and many are recorded as threatened on the IUCN Red List. *Streptostele musaecola* is native to western Africa but has been widely dispersed through human activity (Barker *et al.* 2005). The species is introduced to Fiji but to date known only from Viti Levu.

### Habitat & Threats

#### Habitat

In Fiji, *S. musaecola* is found in lowland disturbed forest (Barker *et al.* 2005). The species is generally found in litter and under stones and logs. In Malaysia members of this family are almost exclusively associated with limestone hills (Bentham Jutting 1954) but this is not the case

elsewhere. In Tahiti recorded in gardens and secondary-growth scrub (Solem 1988).

#### Threats

*S. musaecola* has the capacity to feed voraciously on small or young native snails. However, its impact on the native snail fauna of Fiji is to date undocumented.



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#### Special points of interest:

- Despite its small size *Streptostele musaecola* is a carnivorous predator capable of impacting on populations of small native snails.
- *S. musaecola* has the same feeding method as the famous high risk carnivorous snail *Euglandina rosea*.
- The impact of *S. musaecola* on native fauna of the Fiji Islands is to date undocumented.

## FIJI LAND SNAILS

Drawing adapted from Solem (1988)  
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<http://www.publish.csiro.au/nid/120/paper/IT9880455.htm>



## Behaviour & Biology

Almost all members of the family Streptaxidae are carnivores that can feed on a variety of invertebrates including other snails (Stanisic 1998). *Streptostele musaecola* however is considered to be a molluscivorous species. That is, it is known to primarily feed on other molluscs (see Robinson *et al.* 2009). Although it is primar-

ily a carnivorous predator, *S. musaecola* may also consume fungi and vegetable matter. The species is hermaphroditic (an individual may function as both male and female over their life time). According to Stanisic (1998) the eggs of members of the family Streptaxidae are comparatively large and few in number.

## Similar Species

In shell shape and body colour *Streptostele musaecola* is most often mistaken for *Gulella bicolor* (Hutton). This latter species is less elongate than *S. musaecola* and has obvious "teeth" clearly visible in the shell aperture. The shell of *S. musaecola* is also similar in appearance to members of the family Subulinidae, some of which are also introduced to Fiji. All subulinids

currently found in Fiji have small, elongate, pale shells that have no armature in the shell aperture. However, subulinids do not have a thickened aperture lip, as do *S. musaecola* and *G. bicolor*. *S. musaecola* is widely reported under the name *Luntia insignis* (E.A. Smith, 1898) (see Hausdorf *et al.* 2003) and also under the genus *Tomostele* (Solem 1988).

## Further Reading

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