

Grosphus grandidieri (Kraepelin 1900)

By
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G.grandidieri, above: ♀, under ♂

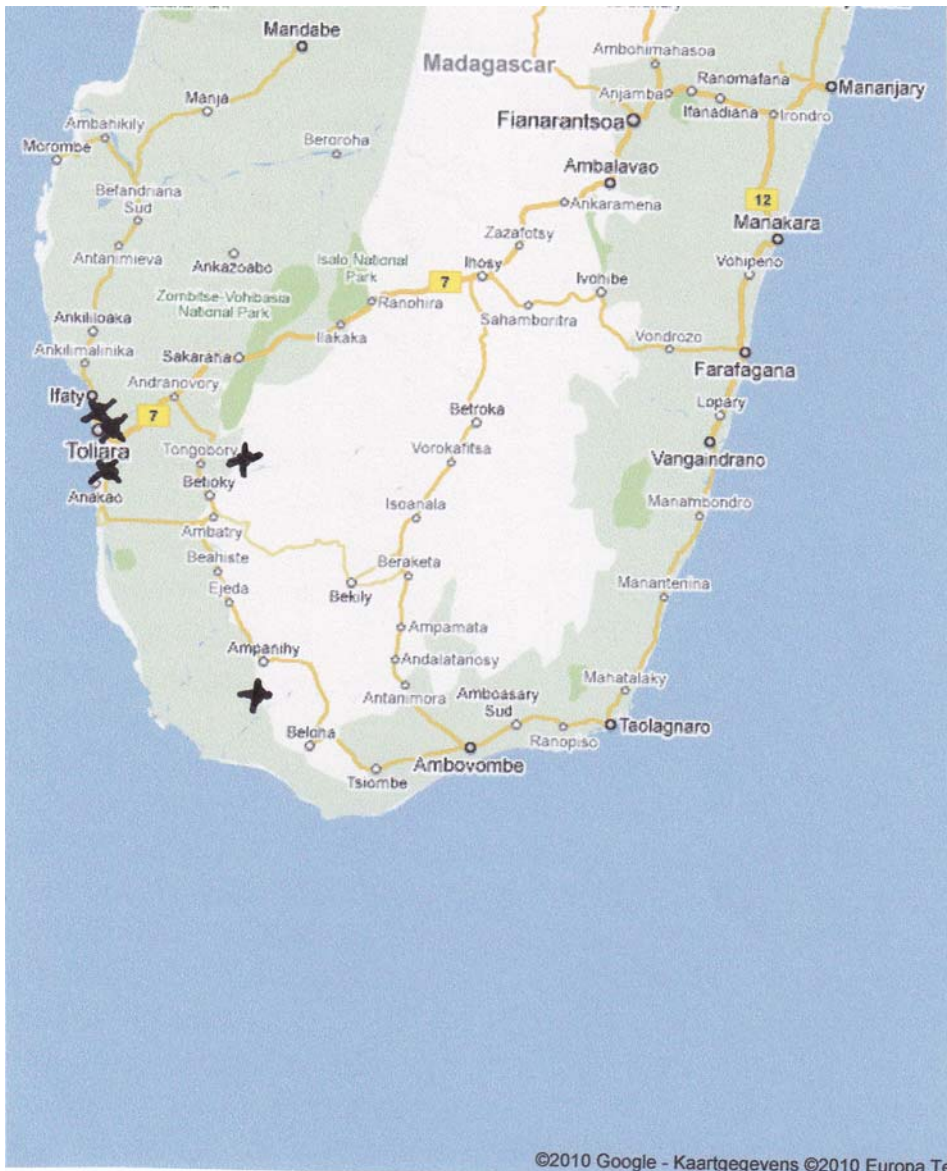
What's in a name?

This scorpion has no generally accepted common name as far as I know.

Etymology:

The species name is in honour of Guillaume Grandidier (1873-1957), a zoologist and palaeontologist that published extensive works about the Malagasy fauna. He collected this species on 23 may 1898, where after Kraepelin described it in 1900 (Lourenço, 2007).

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Southern Madagascar (localities (+), after Lourenço, 1996).

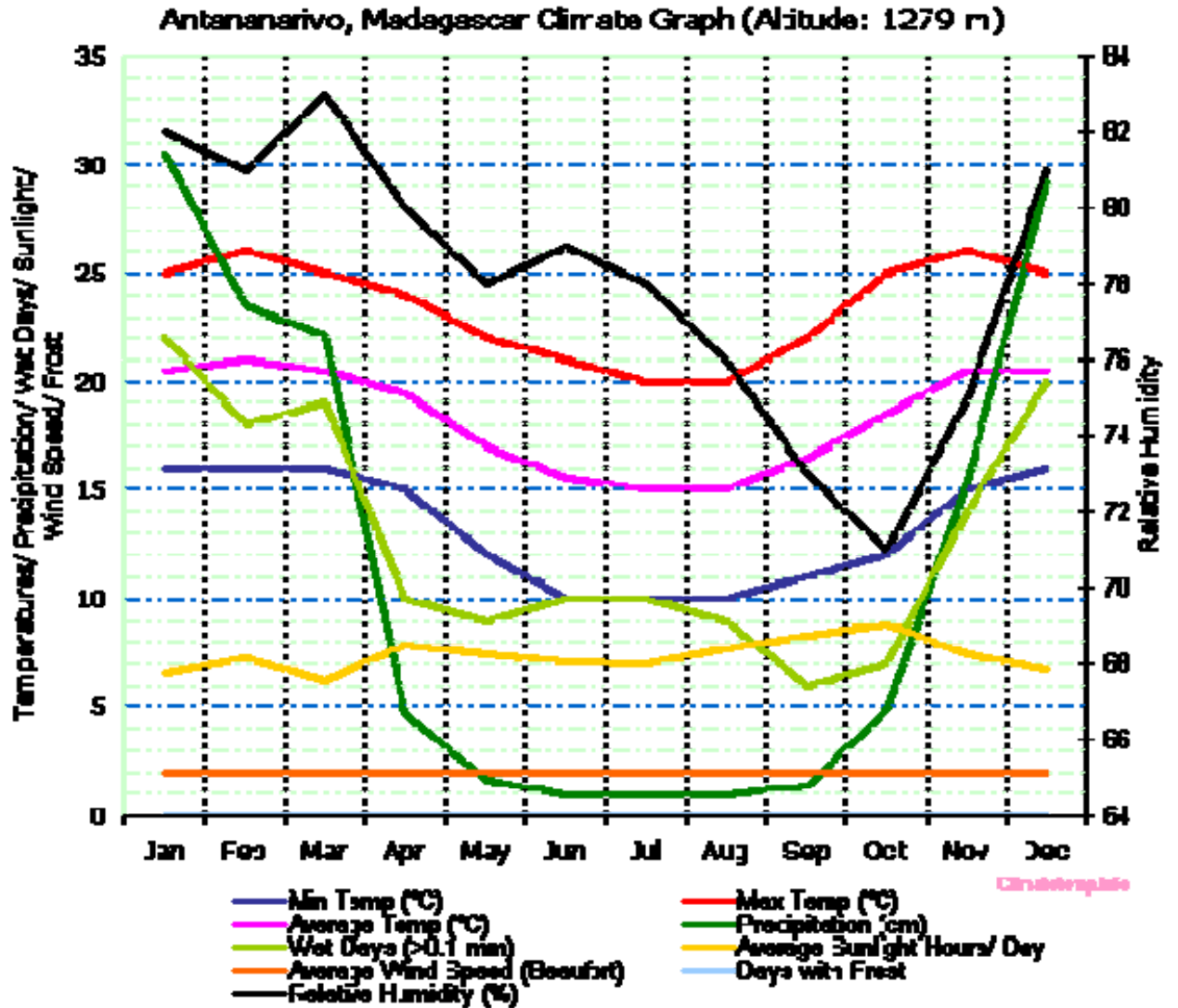
Distribution

The genus *Grosphus* is endemic to the Southwest of Madagascar.

Natural habitat

Madagascar has a tropical climate that is heavily influenced by the South-eastern trade winds. The island receives most rainfall in summer (november- march). Daytime temperatures in summer are around 30 Celsius (86 F) and nights can be very warm during this period. Winter (april-october) has lower temperatures and less rainfall. November has a lot of rain and thunderstorms and they mark the beginning of the wet season. The eastern part receives rain the whole year around and it is not uncommon in summer that it rains the whole day. The central area is dominated by a plateau. Highest point is the summit of Mount Maromokotro (2876 meter/ 9435 feet). The Southern part of the island, especially the South west corner, consists of dry planes with spiny bushes and shrubs. The Northern parts harbour forests with ferns, palms and other trees (i.e. Baobabs, *Adansonia spp.*).

Madagascar Climate Graph (metric)



Source: Climatetemp.info

Venom

Although this scorpion belongs to the family Buthidae (Koch, 1837), it is not considered a medical important species. Since it is a medium to large sized scorpion, one needs to be careful and should not risk getting stung. There is no data available to me on the LD50 value of the venom of this species (or other species from the genus).



G.grandidieri, adult ♂

Morphological information

Simon described the genus *Grosphus* in 1880 (I). The genus *Grosphus* currently contains 19 species. The type species of the genus is *G. madagascariensis* (Gervais, 1843). Within this genus, species complexes (groups of closely related species) exists, such as the *G. madagascariensis*/*G.hirtus* group and the *G. limbatus*/*G. bistriatus* group (Lourenço, 2003, 2004).

Three characters are important in identifying members of the genus: coloration patterns, the shape of the basal middle lamellae in females and the shape and size of metasomal segment I.

G.grandidieri is a large species and can grow up to 90 mm. Adults are dark brown to black, only the tips of the pedipalpal fingers are reddish and the tarsi are lighter, reddish to grey. These two characters, blackish coloration pattern and large size, make them obvious to recognize, compared to other species of the genus. Large bulbous vesicle, with a strong curved aculeus.

Fourteen rows of granules on moveable finger. Pectines with 30-40 teeth, 34-40 in males and 30-34 in females. The basal middle lamellae of the pectines is modified in the females of the species of *Grosphus*, in *G.grandidieri* it is very long and it can reach up to the eighth or ninth pectinal tooth (Lourenço, 1996, 2007).



G.grandidieri, adult ♀

Keeping in captivity

The latter of the following information is based on my own experience and should be regarded as an example of how to keep this species in captivity. This species is being kept and bred by hobbyists, but not on a large scale. In my opinion the minimum size for keeping a pair of adults is around 30x20x20 cm (12x 8x 8 inch). Juveniles can be kept in all kind of deli cups. I keep my juveniles separate to avoid the risk of cannibalism and I keep adults in pairs. I keep this species at a temperature of 24-28 Celsius (75-82 F) in the daytime and around 21 C (70 F) or room temperature at night. Since this species comes from an arid environment, there is no need for high relative humidity levels. These should be kept at the low end, to prevent mycoidal infections or mycosis (II), which can be harmful to scorpions, and even kill them eventually. I lightly mist a corner of the enclosure once a week. When the scorpions are getting close to a moult, make sure the relative humidity is a bit higher than normal to prevent moulting problems.

Humus (70%) mixed with sand (30%) is in my opinion ideal as a substrate. This species does not dig burrows and pieces of cork bark or stones will be accepted as a retreat. Provide a small bottle cap or film roll cap of water, for drinking. I refresh the water weekly. This species breeds without difficulty in captivity. Adults should be fed one or two appropriate sized prey items once a week. I feed my scorpions crickets twice a week until they are passed the third instar. Prey is killed by a (couple of) quick sting(s), depending on the size of the prey item and on the size of the scorpion. Juveniles can subdue surprisingly large crickets for their size, sometimes up to 150% of their own body size. This species can have a somewhat nervous and/ or defensive disposition. *G.grandidieri*, like other species of the genus, does not produce iteroparous litters.



G.grandidieri, instar 3

Notes

Note I: The only correlation I could find with the name “Grosphus” is a person named Pompeius Grosphus that occurs in classical Greek poetry from Horace. I have no idea why Gervais used this name as the genus name.

Note II: Mycosis is an infection in scorpions caused by parasitic fungi. The first signs are usually dark or blackish spots on the structures that are most frequent in contact with the substrate, like the walking legs, the pectines and the spiracles.

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