

# Remarks on the *Phelsuma barbouri*— and *Phelsuma klemmeri*— phenetic groups, *Phelsuma* GRAY, 1825

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## INTRODUCTION

LOVERIDGE (1942) made the first attempt to sort out relationships within the genus *Phelsuma*, neither groups were named nor was a phenetic key provided. In MERTENS's (1962) revision he slightly modified LOVERIDGE's (1942) characteristics and used them to designate species groups. GLAW & VENCES (1994) added and modified groups relevant to that date. For *Phelsuma klemmeri* and *Phelsuma barbouri* however, neither a group was named, nor were they assigned to any of the existing groups. In the latest revision, by GLAW *et. al* (1999), *Phelsuma klemmeri* was placed as a single taxon within the *P. klemmeri*-group and the in the mean time described *Phelsuma pronki* (SEIPP, 1994) was placed together with *Phelsuma barbouri* in the new *P. barbouri*-group.

Recently 4 other taxa were described, *Phelsuma hielscheri*, *Phelsuma kely*, *Phelsuma malamakibo* and *Phelsuma vanheygeni* (NUSSBAUM *et al.* 2000, ROESLER 2000 & LERNER 2004, of which only *P. kely* was designated to a existing species group; the *P. lineata*-group (SCHÖNECKER *et. al* 2004).

## RESULTS & DISCUSSION

*Described species since 1999.*— *P. hielscheri* and *P. malamakibo* seem to be related to the *P. dubia*-group, but both have keeled ventralia. The morphological characteristics of *P. vanheygeni* did not allow it to be assigned to one of the existing species groups. A complete new revision is thus necessary and will be published separately.

*Phelsuma barbouri*-group.— GLAW *et. al* (1999) placed *P. barbouri* together with *P. pronki* in the *P. barbouri*-group based on two criteria; the fact that both species are egg gluers, and the “similarities” between the two species. New records of the reproduction of *P. pronki* however prove that this species lays its eggs and not glues them to a surface (R. GEBHARDT & H-P. BERGHOF, *pers. comm.*) as erroneously published by HENKEL & SCHMIDT (1995). Therefore I suggest to exclude *P. pronki* from the *P. barbouri*-group and leave *P. barbouri* as the only member of this group.

*Phelsuma klemmeri*-group.— GLAW *et. al* (1999) considered *P. klemmeri* as the only species within this group. The new data on the reproduction of *P. pronki*, egg laying in stead of egg gluing, and the similarities in habitus suggest a closer relation to *P. klemmeri*. Both species are dorsoventrally flattened and have one or more strongly enlarged lateral tubercle scales between the orbit and the forelimb. Other similarities are the smooth ventral and

dorsal scales, the uniformity in scalation and the divided subcaudalia, so there is little doubt about the close relationship of both species. *P. pronki* and *P. klemmeri* should form the *P. klemmeri*-group.

*Current temporary status.*— This status only consists of the typical Malagasy taxa and is only temporarily since *P. hielscheri*, *P. malamakibo* and *P. vanheygeni* can not be designated to any of the existing groups, making a complete revision necessary.

<i>P. barbouri</i> -group:	<i>P. barbouri</i>
<i>P. dubia</i> -group:	<i>P. berghofi</i> , <i>P. dubia</i> and <i>P. flavigularis</i>
<i>P. guttata</i> -group:	<i>P. abboti</i> , <i>P. guttata</i> , <i>P. masohoala</i> and <i>P. seippi</i>
<i>P. laticauda</i> -group:	<i>P. antanosy</i> , <i>P. laticauda</i> and <i>P. serraticauda</i>
<i>P. lineata</i> -group:	<i>P. kely</i> , <i>P. lineata</i> , <i>P. pusilla</i> and <i>P. quadriocellata</i>
<i>P. madagascariensis</i> -group:	<i>P. madagascariensis</i> and <i>P. standingi</i>
<i>P. modesta</i> -group <sup>1</sup> :	<i>P. modesta</i>
<i>P. mutabilis</i> -group:	<i>P. breviceps</i> and <i>P. mutabilis</i>
<i>P. klemmeri</i> -group:	<i>P. klemmeri</i> and <i>P. pronki</i>
Not assigned:	<i>P. hielscheri</i> , <i>P. malamakibo</i> and <i>P. vanheygeni</i>

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<sup>1</sup> *P. cepediana* is not a typical Malagasy taxon and is thus excluded