

Review of Oliver et al Gehyra (manuscript #36958)

Detailed comments and corrections:

104-105: that **has** been

106-107: Odd wording. The study does not treat this clade separately – it is just included in the study along with the other putative species. Possibly it stands out initially because as a generalist it morphologically resembles *australis* rather than *koira*. But this explanation is not given here.

117: the potential. “the” not needed

137-146, and 1358: Abbreviations for repositories are explained and listed twice. The Abbreviations section seems redundant.

285-287 and 295-297: repetition of the finding of a lack of admixture. Edit to reduce these to a single mention.

312. where they are known from. Redundant; delete.

330-332: More repetition, first that other member of the *australis* complex are smaller than *G. lauta*, then the statement that *G. lauta* is bigger than the other members of the complex. Edit to remove redundancy.

337: reads as if the species has multiple heads. Fix by changing “heads” to “head dimensions”.

343-344: Delete bad line break.

417-418: Determination of NHMUK xxii.55a as a paralectotype of *G. australis* based on Cogger et al. (1983) predates the current study. The collecting locality of the specimen is unknown, as the Swan River appears to be in error if the specimen has the *G. australis* morphotype. As *G. australis sensu* Cogger et al. (1983) includes all four of the *G. australis* species described here, and potentially one or more of the *G. koira* group species too, until some data can be adduced to firmly place this specimen with *G. australis sensu stricto*, its status must remain doubtful, and this uncertainty should be noted.

461: permits Should be plural – delete s

465: herein’ above. Delete apostrophe

488-491: No Etymology required for a species name already in use. Delete.

493 and later: Not clear why the field numbers of all registered specimens are listed. The field numbers will all be in the data associated with each registration and listing them adds pointless bulk to the manuscript. Suggest removing.

538: In the absence of, or significant overlap... Something missing after “absence of”?

541: relatively

653-654: The relevant text figure images can be referred to in the text at this point. Similar reiteration of figure references could be used in the other descriptions as well.

1158: shows. Should be plural, delete 's'

1159, 1161-62: "Venter is light cream with no observable pattern" and then "Ventral surfaces of torso, head, limbs and tail off-white". Some redundancy here and mild inconsistency in colour shade. Edits needed.

1233: In the diagnosis, *G. calcitecta* is said to be distinguishable from *G. lapistola* by "having a dorsal pattern comprising pale ocelli or blotches (vs pale transverse bands)". However, the description of *G. lapistola* records that this species is "plain grey to brownish dorsum across the head and body with no distinct pattern of barring, banding or spots" (lines 1125-1130; similar remarks 1158-1163). These descriptions need to be corrected to make them consistent.

1294: "...extensive SNP that...". Would read better as "...extensive SNP **data set** that..."

1296: SNP data **were**

1594. Fig. 2. Lower right map has numbered asterisks. These appear to coincide with major towns, but are not explained.

Fig 10. Image quality poor – background appears to dark and so whole image probably needs an adjustment to contrast and colour balance.