A new species of Amaga is described by integrative taxonomy in the MS entitled **A new species of alien land flatworm in the Southern United States**. The entire mitogenome is provided along with phylogenies of some geoplanids inferred from either their mitogenomes or a subset of three molecular markers. The authors provide evidence that the species is new to science and that the species may be indistinguishable from other geoplanid species introduced to the U.S. based on external appearance alone. In the light of hteir data, the authors also make some considerations about what genetic code should be appropriate when dealing with the mitogenome.

The manuscript is clear in its statements and is concise. All figures and tables are necessary. In my opinion, with these minor changes, the MS is suitable for publication in PeerJ:

- Title: Since the author has made relevant considerations about the genetic code that should be used to translate the protein-coding genes of Geoplanidae, I suggest adding the following to the title: "with comments on the mitochondrial genetic code".
- Line 66-7: “*Obama nungara*, native to Brazil and Argentina, is now reported in many countries in Europe (Čapka & Čejka 2021; Justine et al. 2024; Justine et al. 2020b; Mori et al. 2022; Soors et al. 2019; Thunnissen et al. 2022),”. Please consider this paper: Lago-Barcia et al. 2018. Reconstructing routes of invasion of Obama nungara (Platyhelminthes: Tricladida) in the Iberian Peninsula. Biol Invasions DOI 10.1007/s10530-018-1834-9
- Line 128: Froehlich 1955. → Froehlich 1954
- Line 187: Geoplanidae Stimpson, 1857 → Geoplanidae Stimpson, 1858 (Please check front cover of the issue (and not the bottom right corner of the unevenly printed pages of Stimpson's paper))
- Line 211: “is broadly lanceolate ~~in shape~~ with tapered extremities” (since lanceolate is a shape)
- Line 218: Section ‘Diagnosis (on preserved specimens)’. This diagnosis is based on preserved and sectioned specimens, but the title leads the reader to find features that can only be observed in preserved specimens. Therefore, I suggest simply stating "diagnosis" and emphasizing "preserved" whenever necessary along the diagnosis.
- Line 276: ‘The parenchymatous mid-pharyngeal wall is comprised of’. I am not familiar with ‘wall’ in this sense. Is it the same as ‘region’?
- Line 239: ‘The prostatic vesicle empties into the male atrium via a progressively enlarged vertical slit in the sulcus’. An introduction to the term ‘sulcus’ is lacking.
- Line 437: ‘The genus Amaga Ogren and Kawakatsu, 1990 (Ogren & Kawakatsu 1990) presently comprises a heterogeneous group of ~~nine~~ eight species’. Currently, A. olivacea (Müller, 1856 in Schultze, 1856) (not 1857) is placed in Pseudogeoplana (see Ogren et al., 1992. Bull. Fuji Women’s College, (30), II: 59-103. Keep this comment in mind whenever P. olivacea is mentioned in the text.
- Lines 507-9: ‘Of passing interest is the pigment surrounding the testes in A. pseudobama. This phenomenon has previously been observed in Amaga expatria (Jones & Sterrer 2005), and in some other Geoplaninae including Obama ladislavii (von Graff, 1899)’. Pigment surrounding testes is also found in Transandiplana graui Almeida et al., 2023 DOI 10.1093/zoolinnean/zlac072/6808355
- The authors might find it useful to mention in the section ‘Conclusion’ that caution should be exercised in annotating the mitochondrial protein-coding genes of Geoplanidae.
- Abbreviations in figures: csd (common sperm duct) and ed (ejaculatory duct) are not mentioend in the description; sv (seminal vesicle) is not descriped in the description section.
- In the References: Fernández-Álvarez FA → Fernández-Álvarez FÁ; Alvarez-Presas → Álvarez-Presas

Fernando Carbayo