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Correct date and authorship of taxa of Middle American freshwater crabs described by Rodríguez & Smalley (1972) (not 1969) and included in Smalley (1970) (Crustacea: Decapoda: Brachyura: Pseudothelphusidae)

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Abstract

One subgenus and one genus of Pseudothelphusidae described by Gilberto Rodríguez and Alfred E. Smalley from Mexico have been erroneously referred to for over 40 years as variously described in 1968 and 1969. The review of the original publication indicates that these taxa were published in a journal dated 1969 that became available for distribution only in 1972. Smalley (1970), who believed that the original manuscript had been previously published, referred to some of these new taxa (i.e., *Epithelphusa*, *E. mixtepeensis*, *Tehuana* and *T. veracruzana*) and provided sufficient information to make these names available in 1970, thus becoming the correct authorship for these four taxa. Therefore they must be referred to as “Rodríguez & Smalley in Smalley 1970”. A list of all affected taxa with the correct publication date and authorship is given. A list of publications in which the taxa authored by Rodríguez and Smalley were erroneously referred to as published in 1969 is also provided.

Key words: Pseudothelphusidae, freshwater crabs, Mexico, Middle America, authorship, date of publication

Introduction

The late Gilberto Rodríguez was during his career a major contributor to our knowledge of neotropical freshwater crabs. We will refer herein to many of Rodríguez' publications and to contributions published by his colleagues in which they cited his work. The name "Rodríguez", which in Spanish takes an accent on the "i", was unfortunately often misspelled, i.e., without this accent, particularly in contributions written in English. We have respected the spelling of the name "Rodríguez" (i.e., with or without the accent) and for this matter the names of other authors, so that these authors are herein quoted under the exact name and spelling as they appeared in the original works (see Ng 1994; Dubois 2008).

A major contribution to the study of neotropical freshwater crabs is the monograph including 32 genera and 131 species by Rodríguez (Rodríguez 1982), a publication that has since been used as a standard reference on these crabs. Among the numerous contributions cited by Rodríguez (Rodríguez 1982; see also Rodríguez 1980), one authored by Gilberto Rodríguez and Alfred E. Smalley was particularly important as it described ten new species, one new subgenus [*Pseudothelphusa* (*Tehuana*)] and one new genus (*Epithelphusa*). This contribution was published in a Mexican journal, the *Anales del Instituto de Biología, Serie Ciencias del Mar y Limnología, UNAM*, reported by Rodríguez (1982) as "Rodríguez & Smalley (1969)".

An examination of the original volume (vol. 40, no. 1) in which this contribution was published has shown that it was actually issued on the 25th of January 1972 (*25 de enero de 1972*) as indicated on the printer page, at the end of the volume, although the cover page indicates 1969 as the publication date. According to Article 21 of the *International Code of Zoological Nomenclature* (Anonymous 1999), it would therefore appear that the use of the

Quite important is the fact that all description dates for taxa included in Table 1 and found in databases on line such as WoRMS (World Register of Marine Species) are also erroneous and must be corrected. Some non-taxonomical papers quoting the incorrect date of the paper of Rodríguez and Smalley, such as that of Gelder (1999) dealing with ectosymbionts on freshwater crustaceans and giving the date of 1970, are not listed here. It is quite possible that some of the contributions in which "Rodríguez & Smalley" taxa are quoted have been overlooked during our search. We leave to the specialists the task of completing our quest.

Acknowledgments

We thank J.L. Villalobos (Instituto de Biología, UNAM, Mexico), C. Magalhães (Instituto Nacional de Pesquisas da Amazônia, Manaus, Brazil) and M. Türkay (Senckenberg Forschungsinstitut und Naturmuseum, Frankfurt a.M., Germany) for providing a copy of their contributions. We also acknowledge the assistance of Paul F. Clark (The Natural History Museum, London) who very kindly assisted in checking the copies of the papers of interest at this institution. Detailed review and suggestions of C. Magalhães, M.E.Y. Low (Raffles Museum of Biodiversity Research, National University of Singapore), and P. Castro (California State Polytechnic University, Pomona, U.S.A.) helped improve the original manuscript.

References (see also Appendix)

[NOTE. The authors are herein quoted under the exact name and spelling as their signature that appeared in the publications, such as "Rodriguez" instead of "Rodríguez" or "Alvarez" instead of "Álvarez" (see Ng 1994; Dubois 2008)]

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APPENDIX. References since 1972 in which species, subgenus or genus originally named by Rodríguez & Smalley (1972) [1969] (in **bold face**) have been erroneously cited as "Rodríguez & Smalley, 1969". * Taxa cited in the same contribution but that were actually described by Rodríguez & Smalley in Smalley, 1970. ** Taxa cited as "Smalley". See *text and Table 1* for details.

Reference	Taxa names
Pretzmann, G. (1972) Die Pseudothelphusidae (Crustacea, Brachyura). <i>Zoologica</i> , 42(120) pt 1, 15–182.	Tehuana ** <i>Pseudothelphusa (Tehuana) veracruzana</i> ** <i>Epithelphusa</i> * <i>Epithelphusa mixtepecensis</i> *
Pretzmann, G. (1974) Zur Systematik der Pseudothelphusidae (Decapoda, Brachyura). <i>Crustaceana</i> , 27(3), 294–302.	Tehuana ** <i>Epithelphusa</i> **
Türkay, M. (1978) Die Identität von <i>Pseudothelphusa complanata</i> Rathbun, 1905 mit Bemerkungen zu <i>Pseudothelphusa (Tehuana) Rodríguez and Smalley, 1969</i> (Crustacea: Decapoda: Pseudothelphusidae). <i>Senckenbergiana biologica</i> , 59(1/2), 143–150.	<i>Pseudothelphusa (Tehuana) cordobensis</i> <i>Pseudothelphusa (Tehuana) veracruzana</i> *
Villalobos, F.A. (1982) Decapoda. Pp. 215–239. In: Hurlbert, S.H. & Villalobos-Figueroa, A. (Eds.), <i>Aquatic biota of Mexico, Central America and the West Indies</i> . San Diego State University, San Diego, 529 pp.	<i>Epithelphusa mixtepecensis</i> * <i>Epithelphusa chiapensis</i> Tehuana veracruzana * <i>Pseudothelphusa lophophallus</i> <i>Pseudothelphusa sonora</i> = <i>Pseudothelphusa sonorensis</i> Miles, 1967 <i>Pseudothelphusa granatensis</i> <i>Pseudothelphusa leiophrys</i>
Rodríguez, G. (1982) Les crabes d'eau douce d'Amérique. Famille des Pseudothelphusidae. <i>Faune Tropicale</i> , ORSTOM, Paris, 22, 224 pp.	<i>Epithelphusa</i> * <i>Epithelphusa mixtepecensis</i> * <i>Epithelphusa chiapensis</i> <i>Pseudothelphusa granatensis</i> <i>Pseudothelphusa leiophrys</i> <i>Pseudothelphusa lophophallus</i> <i>Pseudothelphusa peyotensis</i> <i>Pseudothelphusa sonora</i> = <i>Pseudothelphusa sonorensis</i> Miles, 1967 Tehuana * Tehuana veracruzana *
Alvarez-Noguera, F. (1987) <i>Pseudothelphusa mexicana</i> , a new freshwater crab from the state of Guerrero, Mexico (Brachyura: Pseudothelphusidae). <i>Proceedings of the Biological Society of Washington</i> , 100(1), 1–3.	<i>Pseudothelphusa granatensis</i>
Magalhães, C. (1987) Notes on some Pseudothelphusidae crabs from Venezuela, Ecuador and Mexico found in the collection of the Museu de Zoologia da Universidade de São Paulo, São Paulo, Brazil. <i>Revista Brasileira de Zoologia</i> , 4(1), 55–58.	<i>Epithelphusa chiapensis</i>
Alvarez, F. (1989) <i>Smalleyus tricristatus</i> , new genus, new species, and <i>Pseudothelphusa parabelliana</i> , new species (Brachyura: Pseudothelphusidae) from los Tuxtlas, Veracruz, Mexico. <i>Proceedings of the Biological Society of Washington</i> , 102(1), 45–49.	Tehuana veracruzana * <i>Pseudothelphusa peyotensis</i> <i>Pseudothelphusa leiophrys</i>

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APPENDIX. (Continued)

Reference	Taxa names
Hobbs, H.H.III. (1991) A new pseudothelphusid crab from a cave in southern Costa Rica (Decapoda: Brachyura). <i>Proceedings of the Biological Society of Washington</i> , 104(2), 295–298.	<i>Pseudothelphusa leiophrys</i> <i>Pseudothelphusa granatensis</i>
Alvarez, F. & Villalobos, J.L. (1994) Two new species and one new combination of freshwater crabs from Mexico (Crustacea: Brachyura: Pseudothelphusidae). <i>Proceedings of the Biological Society of Washington</i> , 107(4), 729–737.	<i>Tehuana</i> * <i>Epithelphusa</i> * <i>Pseudothelphusa</i> (<i>Pseudothelphusa</i>) <i>guerreroensis</i> <i>Pseudothelphusa lophophallus</i> <i>Pseudothelphusa sonora</i> <i>Pseudothelphusa peyotensis</i> <i>Pseudothelphusa leiophrys</i>
Álvarez, F. & Villalobos, J.L. (1995) Lista anotada de los tipos de la colección de Crustáceos (Decapoda: Brachyura) del Instituto de Biología, de la Universidad Nacional Autónoma de México. <i>Revista de la Sociedad Mexicana de Historia Natural</i> , 46, 86–96.	<i>Epithelphusa chiapensis</i> <i>Spirothelphusa chiapensis</i> <i>Epithelphusa mixtepecensis</i> * <i>Tehuana veracruzana</i> * <i>Pseudothelphusa</i> (<i>Tehuana</i>) <i>veracruzana</i> * <i>Pseudothelphusa granatensis</i> <i>Pseudothelphusa</i> (<i>Pseudothelphusa</i>) <i>granatensis</i> <i>Pseudothelphusa peyotensis</i> <i>Pseudothelphusa</i> (<i>Pseudothelphusa</i>) <i>peyotensis</i>
Álvarez, F. & Villalobos, J.L. (1996) Especie nueva de cangrejo de agua dulce del género <i>Pseudothelphusa</i> (Brachyura: Pseudothelphusidae) de Guerrero, México. <i>Anales del Instituto de Biología</i> , Universidad Nacional Autónoma de México, series Zoología, 67(2), 297–302.	<i>Pseudothelphusa granatensis</i> <i>Pseudothelphusa leiophrys</i> <i>Pseudothelphusa peyotensis</i>
Alvarez, F. & Villalobos, J.L. (1997) <i>Pseudothelphusa ayutlaensis</i> , a new species of freshwater crab (Crustacea: Brachyura: Pseudothelphusidae) from Mexico. <i>Proceedings of the Biological Society of Washington</i> , 110(3), 338–392.	<i>Pseudothelphusa sonora</i> <i>Pseudothelphusa lophophallus</i>
Alvarez, F. & Villalobos, J.L. (1998) Six new species of fresh-water crabs (Brachyura: Pseudothelphusidae) from Chiapas, Mexico. <i>Journal of Crustacean Biology</i> , 18(1), 187–198.	<i>Epithelphusa chiapensis</i>
Álvarez, F., Villalobos, J.L., Rojas, Y. & Robles, R. (1999) Listas y comentarios sobre los crustáceos decápodos de Veracruz, México. <i>Anales del Instituto de Biología</i> , Universidad Nacional Autónoma de México, Serie Zoología, 70(10), 1–27.	<i>Tehuana veracruzana</i> *
Villalobos, J.L. & Alvarez, F. (2003) Two new species of freshwater crabs of the genus <i>Tehuana</i> (Brachyura: Pseudothelphusidae) from southern Mexico. <i>Journal of Crustacean Biology</i> , 23(1), 223–229.	<i>Tehuana</i> * <i>Tehuana veracruzana</i> *
Rodríguez, G. & Magalhães, C. (2005) Recent advances in the biology of the Neotropical freshwater crab family Pseudothelphusidae (Crustacea, Decapoda, Brachyura). <i>Revista Brasileira de Zoologia</i> , 22(2), 354–365.	<i>Tehuana</i> *

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APPENDIX. (Continued)

Reference	Taxa names
Villalobos Hiriart, J.L. & Álvarez, F. (2008) Los cangrejos de agua dulce de la familia Pseudothelphusidae (Decapoda: Brachyura: Eubrachyura) de México, con un apéndice de las especies citadas para América hasta 2006. Cap. 9. Pp. 239–299. In: Álvarez, F. & Rodríguez Almaraz, G. (Eds.), <i>Crustáceos de México. Estado actual de su conocimiento</i> . Universidad Autónoma de Nuevo León.	<i>Pseudothelphusa granatensis</i> <i>Pseudothelphusa leiophrys</i> <i>Pseudothelphusa lophophallus</i> <i>Pseudothelphusa peyotensis</i> Tehuana * <i>Tehuana veracruzana</i> * <i>Epithelphusa</i> * <i>Epithelphusa chiapensis</i> <i>Epithelphusa mixtepecensis</i> *
Ng, P.K.L., Guinot, D. & Davie, P.J.F. (2008) Systema Brachyurorum. Part I. Annotated checklist of extant brachyuran crabs of the world. <i>Raffles Bulletin of Zoology</i> , Suppl. 17, 1–286.	<i>Epithelphusa</i> * <i>Epithelphusa chiapensis</i> <i>Epithelphusa mixtepecensis</i> * <i>Pseudothelphusa granatensis</i> <i>Pseudothelphusa leiophrys</i> <i>Pseudothelphusa lophophallus</i> <i>Pseudothelphusa peyotensis</i> <i>Pseudothelphusa sonorae</i> Tehuana * <i>Tehuana veracruzana</i> *
Villalobos, J.L. & Alvarez, F. (2010) Phylogenetic analysis of the Mexican freshwater crabs of the tribe Pseudothelphusini (Decapoda: Brachyura: Pseudothelphusidae). <i>Zoological Journal of the Linnean Society</i> , 160(3), 457–481.	<i>Epithelphusa</i> * <i>Epithelphusa chiapensis</i> <i>Epithelphusa mixtepecensis</i> * <i>Pseudothelphusa granatensis</i> <i>Pseudothelphusa leiophrys</i> <i>Pseudothelphusa lophophallus</i> <i>Pseudothelphusa peyotensis</i> Tehuana * <i>Tehuana veracruzana</i> *
Ng, P.K.L. & Low, M.E.Y. (2010) On the generic nomenclature of nine brachyuran names, with four replacement names and two nomina protecta (Crustacea: Decapoda). <i>Zootaxa</i> , 2489, 34–46.	<i>Epithelphusa</i> * <i>Pseudothelphusa granatensis</i> <i>Pseudothelphusa leiophrys</i> <i>Pseudothelphusa lophophallus</i> <i>Pseudothelphusa peyotensis</i> <i>Pseudothelphusa sonorae</i> <i>Spirothelphusa chiapensis</i> Tehuana * <i>Tehuana veracruzana</i> *
Álvarez, F., Villalobos, J.L., Elías-Gutiérrez, M. & Rivera, G. (2011) <i>Crustáceos dulceacuícolas y terrestres de Chiapas</i> . In: Álvarez Noguera, F. (Coord.), Chiapas: estudios sobre su diversidad biológica. Pp. 209–297. México, D.F., Universidad Nacional Autónoma de México, 518 pp.	Tehuana * <i>Tehuana veracruzana</i> *
Álvarez Noguera, F., Villalobos, J.L. & Cházaro-Olvera, S. (2011) Camarones y cangrejos dulceacuícolas y marinos (Crustacea: Decapoda). In: Cruz-Angón, A., Lorea-Hernández, F.G., Hernández-Ortiz, V. & Morales-Mavil, J.E. (Eds.), <i>La biodiversidad en Veracruz, estudio de estado, diversidad de especies: conocimiento actual</i> . Vol. 2. Pp. 287–294. Comisión Nacional para el Conocimiento y Uso de la Biodiversidad, Gobierno del Estado de Veracruz, Universidad Veracruzana, Instituto de Ecología.	<i>Tehuana veracruzana</i> *

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APPENDIX. (Continued)

Reference	Taxa names
Alvarez, F., Villalobos, J.L. & Moreno, E. (2012) <i>Pseudothelphusa zongolicae</i> (Decapoda, Pseudothelphusidae), a new species of freshwater crab from Veracruz, Mexico. <i>Crustaceana</i> , 85(12-13), 1541–1547.	<i>Pseudothelphusa granatensis</i>
