



***Hyla prasina* Burmeister, 1856 meets the requirements of Article 23.9.1 of the Code for a reversal of precedence over *Hyla quoyi* Bory de Saint-Vincent, 1828 (Anura, Hylidae)**

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In a recent work, Ohler and Dubois (2018) discussed the correct application of Article 23.9 of the *Code* (Anonymous, 1999; 2012) and illustrated it with some concrete cases in which the authors considered that the Article was misinterpreted. Article 23.9 of the *Code* allows the “reversal of precedence”, that is, that when a senior homonym or synonym has not been used as a valid *nomen* after 1899 (Article 23.9.1.1) and its junior synonym or homonym has been used as valid for the same taxon in at least 25 works published by at least 10 authors in the immediately preceding 50 years and encompassing a span of not less than 10 years (Article 23.9.1.2), the junior homonym or synonym must be maintained as valid (Article 23.9.1). One of the cases considered by Ohler and Dubois (2018) is the treatment given by Caramaschi and Niemeyer (2010) to the names *Hyla prasina* Burmeister, 1856 (under the combination *Hypsiboas prasinus*), and *Hyla quoyi* Bory de Saint-Vincent, 1828.

Caramaschi and Niemeyer (2010) demonstrated that both names refer to the same species and are then subjective synonyms. *Hyla prasina* (= *Hypsiboas prasinus*) was then a well-established name in the herpetological literature (see below), while *Hyla quoyi* was considered “*insertae sedis*” and (without justification) “*nomen oblitum*” by Frost’s (2010) website “Amphibian Species of the World: an online reference” (this website was accessed by Caramaschi and Niemeyer (2010) on 17 June 2010, and this version is no longer available online). Caramaschi and Niemeyer (2010) then considered *Hyla quoyi* an unavailable name (erroneously, and based on Frost’s (2010) assertion), and stated that “*Hypsiboas prasinus* (Burmeister, 1856) is a *nomen protectum* (ICZN 1999) relative to *Hyla quoyi* Bory de Saint-Vincent, 1828, a *nomen oblitum*.”. We agree with Ohler and Dubois (2018) that this nomenclatural act made by Caramaschi and Niemeyer (2010) is not valid because *Hyla quoyi* was then (as it is now) an available name, and, mainly, because it was not justified with evidence that the conditions stated in Article 23.9.1 were met (Article 23.9.2). But, the fact is that Caramaschi and Niemeyer’s (2010) conclusion is inherently right, since *Hyla prasina* (= *Hypsiboas prasinus*) actually met at that time the conditions to be considered a *nomen protectum* under Article 23.9.1, that is, a reversal of precedence over *Hyla quoyi* (see below).

Ohler and Dubois (2018) stated that “*Hyla prasina* has been used very rarely in the scientific literature” and that they “carried out a search on *Web of Science Core Collection* and *Web of Science Zoological Record*, and (we) recovered only 11 such references, so that it is clear that the conditions of implementation of Article 23.9 are not complied with and the regular Rules of the *Code* must be applied. In conclusion, this species should now be known under the *nomen Boana quoyi*”.

It is clear from the previous paragraph that Ohler and Dubois’ (2018) intention was to determine if *Hyla prasina* met the conditions of Article 23.9 for a reversal of precedence and they concluded that it did not. But, contrary to Ohler and Dubois (2018), we are aware of a well-established and widespread use of the name *Hyla prasina* (= *Hypsiboas prasinus*) in the zoological literature, so we performed a manual search among many published papers, and we found evidence that *Hyla prasina* Burmeister, 1856 actually complies with the requirements of Article 23.9.1 of the Code for a reversal of precedence over *Hyla quoyi* Bory de Saint-Vincent, 1828. Since Ohler and Dubois’ (2018) nomenclatural act is based on a false premise (“that the conditions of implementation of Article 23.9 are not complied with”), and their conclusion is wrong (that then “the regular Rules of the *Code* must be applied”), we do not accept as valid the usage of *Boana quoyi* (= *Hyla quoyi*) in Ohler and Dubois’ (2018) work for the purpose of application of Article 23.9.1.1, and consequently, any

eventual posterior usage of this name following Ohler and Dubois (2018). This proposition is further supported by the *purpose* of the Principle of Priority as stated in Article 23.2 of the *Code*: “the Principle of Priority is to be used to promote stability and it is not intended to be used to upset a long-accepted name in its accustomed meaning by the introduction of a name that is its senior synonym or homonym (for certain such cases see Article 23.9)”. We believe that trying to impose the usage of the name *Hyla quoyi* over *Hyla prasina* by considering Ohler and Dubois’ (2018) wrong usage of the former name a valid one, is clearly against the purpose of the Principle of Priority.

Following Article 23.9.2 of the *Code*, we herewith declare that both the conditions of Article 23.9.1 are met and hence the younger synonym *Hyla prasina* Burmeister, 1856 is *nomen protectum* and the senior synonym *Hyla quoyi* Bory de Saint-Vincent, 1828 is *nomen oblitum*, substantiated by the following evidence:

Usage instances for *Hyla quoyi* as a valid name after 1899 within the scope of Article 23.9.1: none

Usage instances for *Hyla prasina* (and its combinations *Hypsiboas prasinus* and *Boana prasina*) as a valid name: Aguiar *et al.* 2014; Ananias *et al.* 2004; Andrade *et al.* 2016; Antunes *et al.* 2008; Araujo & Almeida-Santos 2013; Araujo *et al.* 2010, 2013; Baldissera *et al.* 1993; Baraquet *et al.* 2013; Bazzo *et al.* 2008; Beçak 1968; Bertoluci 1998; Bertoluci & Rodrigues 2002; Madelaire *et al.* 2012, 2013; Brunetti *et al.* 2015; Campião *et al.* 2014; Caramaschi & Niemeyer 2010; Catroli & Kasahara 2009; Condez *et al.* 2009; Conte & Rossa-Feres 2006, 2007; Crivellari *et al.* 2011, 2014; d’Heursel & Haddad 2007; Delgado & Haddad 2015; Duellman 1999; Duellman *et al.* 1997, 2016 Eterovick *et al.* 2002, 2005; Faivovich *et al.* 2004, 2005, 2013; Ferro *et al.* 2018; Forlani *et al.* 2010; Garcia & Haddad 2008; Garcia *et al.* 2003, 2007, 2008; Gonçalves *et al.* 2015; Greenspan *et al.* 2016; Grundler *et al.* 2012; Guerra & Bastos 2014; Guerra *et al.* 2015; Hernández-Guzmán *et al.* 2011; Haddad *et al.* 2008; Haddad & Sazima 1992; Heyer *et al.* 1988, 1990; Iop *et al.* 2011; Kiss *et al.* 2009; Köhler *et al.* 2017; Kolenc *et al.* 2008; Kwet 2008; Kwet *et al.* 2010; Kwet & Miranda 2001; Lehr *et al.* 2011; Lema & Martins 2011; Lutz 1973; Machado & Maltchik 2007; Mattos *et al.* 2014; McAllister *et al.* 2013; Melo *et al.* 2007; Muniz *et al.* 2008; Nali *et al.* 2014; Nascimento *et al.* 2015; Nazaretti & Conte 2015; Nunes & Fagundes 2008; Pinheiro *et al.* 2016; Pombal J.P.Jr. 1997, 2010; Pyron 2014; Pyron & Wiens 2011; Reynolds & Foster 1992; Ribeiro *et al.* 2005; Rossa-Feres *et al.* 2011; Santos *et al.* 2014; Shibatta *et al.* 2009; Silva *et al.* 2016; Taboada *et al.* 2017; Toledo & Haddad 2009; Toledo *et al.* 2011; Toledo *et al.* 2013; Zina *et al.* 2007, 2014.

The list comprises 86 publications, published by 63 first authors in the immediately preceding 50 years, encompassing a span of 50 years, demonstrating that the name *Hyla prasina* / *Hypsiboas prasinus* has been used extensively in the herpetological literature, and that, following Dubois (2017) should be used under the combination *Boana prasina*.

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