

# The eponyms honoring Tetsuaki Kira; a note on the nomenclature of the molluscan taxonomic epithets *kirai*, *kirana*, *kiranum* and *kiranus*

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Three different epithets, i.e. *kirai*, *kirana* and *kiranus*, all based on the male Japanese malacologist Tetsuaki Kira, have been used for naming new molluscan species. The Latinized names are *kirai*, a noun in the genitive case, and *kiranus*, an adjective. The original spelling of the former is to be retained, the latter must agree with the generic name. However, *kirana*, could be a Latinization, and thus an adjective, or a Japanese word. If it is the latter, the original spelling is fixed. Arguments for both views are put forward. It is concluded that *kirana* is most probably a Latinized word.

Key words: Mollusca, Tetsuaki Kira, eponyms, taxonomy.

The Japanese malacologist Tetsuaki Kira (1888-1965) was a Buddhist priest (without a temple or parishioners) and worked as a school teacher and a headmaster (Okutani,

1971; Callomon, 2003). He is known for his books "Coloured illustrations of the shells of Japan" and "Shells of the western Pacific in colour Vol. I" with a large number of printings with great differences in text and illustrations (Bieler & Petit, 1990).

When looking at the different species of the genus *Frigidocardium* I noticed the confusing array of eponyms related to Kira. A general literature search resulted in 15 different species with a specific name based on Kira (Higo, Callomon & Goto, 1999). Recently number 16 was introduced by Huber (2010b: 12). As far as known only the latter explicitly reports naming the taxon after Tetsuaki Kira. A survey of all eponyms is given in Table 1. The most common eponym is *kirai*, which has been introduced 11 times; *kirana* has been coined three times and *kiranus* twice. The species epithet *kiranum* has been used only for one species, *Frigidocardium kiranum* Sukarai & Habe, 1966 (Keen, 1973; Habe, 1977; Higo & Goto, 1993; Hasegawa & Saito, 1995; Huber & Ter Poorten,

Original name	Author(s), year	Present name	Remarks
<i>Psiliteredo kirai</i>	Taki & Habe, 1945	<i>Nototeredo edax</i> (Hedley, 1895)	
<i>Acteon kirai</i>	Habe, 1949	<i>Punctacteon kirai</i>	
<i>Neilonella kirai</i>	Habe, 1953	See original name	
<i>Chelyconus fulmen kirai</i>	Kuroda, 1956	<i>Conus fulmen</i> Reeve, 1843	
<i>Granulifusus kiranus</i>	Shuto, 1958	See original name	Kuroda MS, <i>sensu</i> Kira, 1954
<i>Latiaxis kiranus</i>	Kuroda, 1959	<i>Babelomurex indicus</i> (E.A. Smith, 1899)	Based on <i>Latiaxis kieneri sensu</i> Kira, 1959
<i>Liotella kirai</i>	Habe, 1961	<i>Munditiella kirai</i>	
<i>Nassaria magnifica</i> var. <i>kirai</i>	Habe, 1961	See original name	Based on <i>Nassaria lischkei sensu</i> Kira, 1959
<i>Noditerebra kirai</i>	Oyama, 1962	<i>Duplicaria kirai</i>	
<i>Monfortia kirana</i>	Habe, 1963	<i>Monfortista kirana</i>	
<i>Corculum kirai</i>	Shikama, 1964	<i>Corculum cardissa</i> (Linnaeus, 1758)	
<i>Babylonia kirana</i>	Habe, 1965	See original name	Based on <i>Babylonia pallida sensu</i> Kira, 1959
<i>Frigidocardium kirana</i>	Sakurai & Habe, 1966	<i>Frigidocardium kiranum</i> *)	
<i>Comitas kirai</i>	Powell, 1969	See original name	Based on <i>Turricula lurida sensu</i> Kira, 1952
<i>Ginebis kirai</i>	Sakurai, 1983	<i>Ginebis argenteonitens</i> (Lischke, 1872)	
<i>Sunetta (Sunemeroe) kirai</i>	Huber, 2010	<i>Sunetta kirai</i>	
*) listed as such in WoRMS, by Higo, Callomon & Goto (1999) as <i>F. kirana</i>			

Table 1: Chronological survey of Tetsuaki Kira's (1888-1965) specific molluscan eponyms, based on Higo, Callomon & Goto (1999) and WoRMS (World Register of Marine Species; <http://www.marinespecies.org/index.php>) on 27 June 2014

2007; Huber, 2010a; Bouchet & Ter Poorten, 2013), as an emendation of the original taxon *F. kirana*. According to Ter Poorten (2009) this is an unjustified emendation. Ter Poorten (2005, 2011) and Higo et al. (1999, 2001) also use the original name *F. kirana*.

Tadashige Habe (1916-2001) introduced, as author or co-author, the epithet *kirai* five times in the period 1945-1961. From 1963 to 1966 he coined the epithet *kirana* three times. Why did he change from *kirai* to *kirana*? In Japanese the word "kirai" means "to hate" and the word "kirana" is a noun in the genitive case (in litt. J.-M. Poutiers to J.J. ter Poorten, 24 September 2009). Thus, this Japanese word has the same meaning as the Latin word "kirai". If this is true, the avoiding of "kirai" is in agreement with principle 4 of the Code of Ethics of the I.C.Z.N. (Appendix A). Here, it is

stated that "No author should propose a name that ... give offence on any grounds".

Around 1962 Habe moved from Kyushu to Kyoto, where, amongst others, Kira and Kuroda (1886-1987) were having informal monthly meetings (Okutani, 1971; Callomon, 2002). Thus, it appears that after joining the group with Kira, Habe changed from using the epithet "kirai" to "kirana". As already indicated above, several authors, including Habe, emended *Frigidocardium kirana* to *F. kiranum*, without doubt based on the gender of the genus name as if it was a Latinized adjective. A name may be derived from any language, provided the Latin alphabet is used (I.C.Z.N., 1999; art. 11.3). And when a name is not a Latin or a latinized word, the original spelling is to be retained (I.C.Z.N., 1999; art. 31.2.3). However, as already reported in 1977,

Habe himself applied the nominal taxon name *Frigidocardium kiranum*. Furthermore, Paul Callomon (in litt. 30 June 2014) and Harry G. Lee (in litt. 11 July 2014) have stated both that the word “kirana” very probably does not exist in Japanese, and is therefore a Latinization of Kira’s name.

The epithet *kiranus* has been used by two authors; see table 1. But, Shuto (1958: 258) clearly indicates that he based his specific name on a manuscript name of Kuroda given to a picture of a shell illustrated by Kira. The same applies to the taxon by Kuroda (1959). A clear indication that the epithet *kiranus* is based on Kira. Thus *kiranus* is an adjective, which must agree with the generic name (I.C.Z.N. 1999; art. 34.2).

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