

## Case 2516

***Heliases ternatensis* Bleeker, 1856 (currently *Chromis ternatensis*; Osteichthyes, Perciformes): proposed conservation, and adoption of the name *Chromis viridis* (Cuvier, 1830) for the fish commonly called *C. caerulea* (Cuvier, 1830)**

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**Abstract.** The purpose of this application is the conservation of the specific name of the Ternate damselfish *Heliases* (now *Chromis*) *ternatensis* Bleeker, 1856 (POMACENTRIDAE) by the suppression of the senior objective synonym *H. caeruleus* Cuvier, 1830. The syntypes of the latter are specimens of *H. ternatensis*. The description given by Cuvier (1830) for *H. caeruleus* does not correspond to the blue-green damselfish long known as *Chromis caerulea*. However, the description of the overlooked *Pomacentrus viridis* Cuvier, 1830 does correspond to this species, and we have proposed that the specific name *viridis* be adopted in place of *caerulea*.

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1. *Heliases ternatensis* was named by Bleeker (1856, p. 377) from three specimens (not known to exist now) collected at Ternate, Indonesia. Now known as *Chromis ternatensis*, it is a common shallow water fish on coral reefs from the Red Sea to Fiji and the Marshall Islands. It is olive to brown in color, fading to whitish ventrally, although the scale centers may be iridescent bluish; the edges of the caudal fin are dark brown or black.

2. *Heliases caeruleus* was named by Cuvier (Cuvier & Valenciennes, 1830, p. 497) from two specimens collected by Quoy and Gaimard in New Guinea. The color of the specimens preserved in alcohol was given as 'd'un brun violâtre; avec une bande noirâtre au bord supérieur et à l'inférieur de la caudale'. Cuvier assumed that this species was the 'belle figure' by Mertens which is deposited in the manuscripts of the *Histoire naturelle des Poissons* by Cuvier & Valenciennes (1830) (MS 490 VB 135, Bibliothèque centrale du Muséum National d'Histoire Naturelle, Paris), and from this he described the probable color in life as 'd'un beau bleu d'azur; que la partie épineuse de sa dorsale est d'un brun violet; la molle, ainsi que l'anale, gris noirâtre; sa caudale jaune, à bord supérieur et inférieur noirâtre, et les pectorales et les ventrales jaunes'.

3. On the page after *H. caeruleus*, Cuvier described (p. 498) two additional species, *H. lepisurus* from New Guinea and *H. frenatus* from Guam. These were both said to be blue above and silvery below; in the former the caudal fin was blackish brown, the other fins pale yellow; the latter had gray fins. Günther (1862, p. 62–63) accepted all three Cuvier species, but Bleeker (1877, pp. 9 and 65) regarded them as one species and



selected the name *Heliases lepisurus*. Neither *lepisurus* nor *frenatus* have been used for at least 60 years.

4. Jordan & Seale (1906, p. 290) also recognised only one species, but (on grounds of page priority) wrongly selected the name *caeruleus*, and used it in combination with *Chromis* Cuvier, 1814. Since then this name has been consistently applied, in numerous publications, to an Indo-Pacific pomacentrid fish which is a bright blue-green with no dark edges on the caudal lobes. This fish is also a shallow-water, coral-reef species and is even more abundant than *C. ternatensis*; it occurs from the Red Sea and coast of East Africa to French Polynesia.

5. Bauchot *et al.* (1978) correctly synonymised *Heliases lepisurus* and *H. frenatus* with *H. caerulea* (= *viridis*), and the type series of *H. caeruleus* (two specimens), *lepisurus* (four specimens) and *frenatus* (seven specimens) are in the Muséum National d'Histoire Naturelle, Paris, with the registration numbers MNHN 5644, MNHN 8254, and MNHN. A. 253 plus MNHN 5744.

6. We have examined the syntypes of *H. caeruleus* and find that these are specimens of *Chromis ternatensis* (Bleeker, 1856). It would cause great confusion to now move the specific name *caerulea* (*Chromis* is feminine, see Opinion 1417) from the blue-green fish, which has been known as such since 1906, to the brown fish of similar habitat which has always been called *C. ternatensis*, even though this should be done on the grounds of priority. We suggest that *ternatensis* be conserved by the suppression of *caerulea*.

7. It is clear that the blue-green fish presently called *caerulea* is not that to which Cuvier (1830) gave the name *Heliases caeruleus* and that the confusion arose because of the use of preserved specimens and a misinterpretation of the Mertens 'figure' MS 490 VB 135 (see paragraph 2). We have found that there is a long overlooked name, *Pomacentrus viridis* Cuvier 1830 (p. 420) with the color given as 'entièrement d'un beau vert d'algue-marine, plus pâle en dessous, plus bleu au dos . . .'; Cuvier attributed the name to Ehrenberg and in part based it on an Ehrenberg painting of a specimen from the Red Sea. This painting is preserved in the Muséum d'Histoire Naturelle as MS 490 VB 8 and we (Randall, Bauchot & Desoutter, 1985, pl. 1A) have reproduced it in color. Comparison of our plates 1A and 1B shows that this is the fish commonly known as *Chromis caerulea*. We (1985, p. 412) have designated the Ehrenberg specimen as the lectotype of *Pomacentrus viridis* and adopted the name *Chromis viridis* (Cuvier, 1830) for the blue-green damselfish previously known as *C. caerulea* (Cuvier, 1830).

8. Another painting mentioned by Cuvier (MS 490 VB 135 by Mertens) is of a specimen from Guam; this is of either *C. viridis* or *C. atripectoralis* (Welanders & Schutz, 1951), but probably the former.

9. The name *viridis* was presumably overlooked by Günther, Bleeker and others because it was listed under *Pomacentrus* rather than *Heliases* in the *Histoire naturelle des Poissons*. Earlier, however, de Kittlitz (1836, p. 306) had said that the 'elegant, beautiful apple-green *P. viridis*' was abundant at Ile Guchan in the Marianas.

10. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary powers to suppress for the purposes of the Principle of Priority but not for those of the Principle of Homonymy the following specific names:
  - (a) *caeruleus* Cuvier, 1830, as published in the binomen *Heliases caeruleus*;
  - (b) *lepisurus* Cuvier, 1830, as published in the binomen *Heliases lepisurus*;
  - (c) *frenatus* Cuvier, 1830, as published in the binomen *Heliases frenatus*;



- (2) to place on the Official List of Specific Names in Zoology the following names:
  - (a) *ternatensis* Bleeker, 1856, as published in the binomen *Heliases ternatensis*;
  - (b) *viridis* Cuvier, 1830, as published in the binomen *Pomacentrus viridis*, and as interpreted by the lectotype designated by Randall, Bauchot & Desoutter (1985);
- (3) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the following names:
  - (a) *caeruleus* Cuvier, 1830, as published in the binomen *Heliases caeruleus*, and as suppressed in (1) (a) above;
  - (b) *lepisurus* Cuvier, 1830, as published in the binomen *Heliases lepisurus*, and as suppressed in (1) (b) above;
  - (c) *frenatus* Cuvier, 1830, as published in the binomen *Heliases frenatus*, and as suppressed in (1) (c) above.

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