

**OLEG E. KOSTERIN (2019) Amendments and updates to F.C. Fraser’s key to Indian *Lestes* spp. (Odonata: Lestidae) to resolve confusion of *L. patricia* Fraser, 1924 and *L. nigriceps* Fraser, 1924, with notes on *L. nodalis* Selys 1891 and *L. garoensis* Lahiri, 1987. *Zootaxa*, 4671: 297–300.**

(i) I assumed the 2<sup>nd</sup> option of couplet 7 by Fraser (1933) (referring to couplet 8 in my amended key), attributed by him to *Lestes patricia* Fraser, 1924, as entirely referring to *Lestes nigriceps* Fraser, 1924, which was missed from the key. In fact this concerned only the characters of the head and dorsum, while the provided number of the forewing postnodal crossveins, 14, referred to *L. patricia* indeed rather than *L. nigriceps*, which has 11–12 postnodals (Fraser 1933; Kosterin 2018). In the amended key, I retained the value of 14 for *L. nigriceps* in error. There is no need to correct this value since association of this key option with *L. nigriceps*, as proposed in my amendment, makes this character useless for identification, as it would be opposed to the same 11–12 postnodals in the 1<sup>st</sup> option. Hence the postnodal number should be just dropped from couplet 8. Also it should be dropped from the preceding couplet 7 of the amended key (couplet 6 by Fraser (1933)), as its 1<sup>st</sup> option refers to 11 postnodals and would be opposed to the option with 11–14 postnodals. The second time corrected version of couplets 7 and 8 are as follows:

7. Vertex of head metallic green; thorax largely black . . . . . *L. angularis* Fraser  
 - Vertex of head non-metallic . . . . . 8
8. Vertex of head pale brown; dorsum of thorax pale brown, with very prominent brilliant metallic green dorsal stripes . . . . .  
 . . . . . *L. viridulus* Ramb.  
 - Vertex of head mat black; dorsum of thorax black with an obscure narrow metallic green stripe on each side. . . . .  
 . . . . . *L. nigriceps* Fraser

(ii) In my amendment, I paid attention on the controversy in Fraser’s characteristic of the paraprocts of *L. patricia* as “very short, digitate, extending nearly to the end of expanded part of superiors” (Fraser 1933: 48), although in *Lestes*, extending to the end of the expanded part of the superiors would mean being very long rather than very short. The drawing in Fraser (1933: fig. 19) indeed shows them very long, extending to the expanded parts of the cerci. Recently Benjamin Price, the Curator of the Odonata collection in National History Museum, London, kindly provided photographs of the holotype of *L. patricia*, which show that both verbal statement and figure in Fraser (1933) were incorrect, as the paraprocts reach about the middle of the expanded part of the cerci, and so can be characterised as of intermediate length. The same is shown in a more adequate drawing by the same Fraser in his original description of *L. patricia* (Fraser 1924: plate XXVI, fig. 7). This makes the paraproct length irrelevant for species identification in the key couplet 3 and should be dropped from there. The corrected couplet 3 should be as follows:

3. No broad black dorsal stripe on synthorax (middorsal carina can be finely stressed with black); occiput reddish brown to creamy white. . . . . *L. concinnus*  
 - Synthorax with a broad black dorsal stripe; occiput mat black. . . . . *L. patricia*

(iii) In the amended key, I adopted Fraser’ (1933) notion of the “metallic antehumeral stripes” at the mesepisternum. However, as I had already noted in the preceding paper (Kosterin 2018), at present the term ‘antehumeral stripes’ is traditionally applied to pale stripes of the mesepisternum rather than to dark or metallic stripes (in case of *Lestes* those pale stripes are disposed laterad of the metallic stripes of the mesepisternum, if any). For this reason the term ‘antehumeral stripes’ would better be replaced with ‘metallic dorsal stripes’ in the contemporary version of the key (couplets 1, 6, 8), as is already done in the new version of couplet 8 above.

I do not once more reproduce the entire version of the correct key because time has come to revise the genus *Lestes* of the Indian subcontinent in view of recent materials accumulated by colleagues from its countries.

I am grateful to Benjamin Price at Natural History Museum, London, for the photographs of the holotype of *L. patricia*.

**References**

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