
Validation and replacement of some diatom names published by H.P.Gandhi

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During a long and fruitful career, Professor Hemendrakumar Prithivraj Gandhi (1920-2008) pioneered studies on Indian diatoms, including taxonomy and ecology, and he can truly be called the “Father of Freshwater Diatomology in India.” (Karthick 2009). He authored more than 35 publications covering many fields, including diatom taxonomy, diatom ecology, biostratigraphy, and flowering plants, and described over 320 taxa of diatoms.

Gandhi’s monograph on the freshwater diatoms of the north-western Indian region of Central Gujarat (Gandhi 1998) included 52 new names at the species and varietal level. Unfortunately, 50 of these names are invalid as types, while implied, were not designated in accordance with the provisions of ICN Art. 40 (Turland *et al.* 2018), particularly in respect of Art. 40.6, which requires that for names “... published on or after 1 January 1990, indication of the type must include one of the words “typus” or “holotypus”, or its abbreviation, or its equivalent in a modern language.” As most of Gandhi’s publications were prior to 1990, this difficulty does not arise in relation to names introduced in his earlier publications.

We here validate H.P. Gandhi’s invalid names by designating types, in accordance with ICN Art. 40.5, from illustrations provided by Gandhi (1998) in order to stabilise the taxonomy, or, where later homonyms might be introduced, we propose new names. Further studies of Gandhi’s extensive materials, currently housed at Agharkar Research Institute Herbarium (AHMA) Diatom Collection, Pune, are required to find the original specimens to match the illustrations and to assess their taxonomic validity. Gandhi’s diatom line drawings were rendered with “great precision” using a *camera lucida* (Karthick 2009) and are thus particularly suitable as taxonomic reference points. It would be desirable as these taxa are investigated further that epitypes for the lectotypes be designated of actual specimens either from H.P.Gandhi’s materials or from new collections.

The names are in alphabetical order of the replaced designation. AlgaeBase (<https://www.algaebase.org>), DiatomBase (<https://www.diatombase.org>) and Index Nominum Algarum (<https://ucjeps.berkeley.edu/INA.html>) were used extensively in the compilation of names.

Achnanthes baltalensis H.P.Gandhi ex Karthick, *sp. nov.*

Replaced designation: “*Achnanthes baltalensis* H.P.Gandhi” (Gandhi 1998: 284).

Description: Gandhi (1998: 285).

Holotype: Gandhi (1998: 295, pl.3: fig. 1, line drawing of a valve view).

Type locality: India: Kashmir: Baltal, Romushi River Valley, Karewa Beds (Plio-Pleistocene).

Achnanthes baltalensis* var. *ovalis H.P.Gandhi ex Karthick, *var. nov.*

Replaced designation: *Achnanthes baltalensis* var. *ovalis* H.P.Gandhi (Gandhi 1998: 286).

Description: : Gandhi (1998: 286).

Holotype: Gandhi (1998: 295, pl. 3: fig. 7, a line drawing of valve view of the specimen).
Type locality: India: Kashmir: Baltal Romushi River Valley, Karewa Beds (Plio-Pleistocene).

Caloneis bacillaris* var. *chandolensis H.P.Gandhi ex Karthick, *var. nov.*

Replaced designation: *Caloneis bacillaris* var. *chandolensis* H.P.Gandhi (1998: 16)

Description: Gandhi (1998: 16).

Holotype: Gandhi (1998: 23, pl. I: fig. 15, a line drawing of valve view of the specimen).

Type locality: India: Gujarat: Lake Chandola.

Caloneis gracilis H.P.Gandhi ex Karthick, *sp. nov.*

Replaced designation: “*Caloneis gracilis* H.P.Gandhi” (Gandhi 1998: 17).

Description: Gandhi (1998: 17).

Holotype: Gandhi (1998: 23, pl. I: fig. 16b, a line drawing of valve view of the specimen).

Type locality: India: Gujarat: Lake Chandola.

Caloneis luzonensis Guiry & Karthick, *sp. nov.*

Replaced designation: “*Caloneis intermedia* H.P.Gandhi” (Gandhi 1998: 89).

Validating description [English]: Gandhi (1998: 89).

Type locality: Philippines: Luzon: Laguna de Bay, Reservoir II near Manila.

Note: “*Caloneis intermedia* H.P.Gandhi” was an intended new combination for *Caloneis silicula* f. *intermedia* Hustedt, an illegitimate name (priority for *Caloneis silicula* var. *intermedia* Mayer (Mayer 1913). However, the name was not inadvertently validated by Gandhi (1998: 89) as only a English description was provided and a Latin description was required at this time. Gandhi (1998: 89) included *Caloneis silicula* [subsp. *ventricosa*] var. *truncatula* (Grunow) Meister [authority cited as “May.”] in synonymy, which requires further taxonomic investigation. Validation of “*Caloneis intermedia* H.P.Gandhi” would however, create a later homonym for *Caloneis intermedia* (Manguin ex Kociolek & Reviere) Moser, Lange-Bertalot & Metzeltin (Moser, Lange-Bertalot & Metzeltin 1998: 26).

Cyclotella iris* var. *baltalensis H.P.Gandhi ex Karthick, *var. nov.*

Replaced designation: “*Cyclotella iris* var. *baltalensis* H.P.Gandhi” (Gandhi 1998: 293).

Description: Gandhi (1998: 293).

Holotype: Gandhi (1998: 295, pl. III: fig. 12, a line drawing of valve view of the specimen).

Type locality: India: Kashmir: Baltal and Ara, Romushi River Valley Karewa Beds (Plio-Pleistocene).

Cyclotella substelligera H.P.Gandhi ex Karthick, *sp. nov.*

Replaced designation: “*Cyclotella substelligera* H.P.Gandhi” (Gandhi 1998: 19).

Description: Gandhi (1998: 19).

Holotype: Gandhi (1998: 23, pl. I: fig. 21, a line drawing of valve view of the specimen).

Type locality: India: Gujarat: Lake Chandola.

Fragilaria construens* var. *fossilis H.P.Gandhi ex Karthick, *var. nov.*

Replaced designation: “*Fragilaria construens* var. *fossilis* H.P.Gandhi” (Gandhi 1998: 297).

Description: Gandhi (1998: 297).

Holotype: Gandhi (1998: 307, pl. 4: fig. 7, a line drawing of valve view of the specimen).

Type locality: India: Kashmir: Baltal, Romushi River Valley Karewa Beds (Plio-Pleistocene)

Fragilaria construens* var. *indica H.P.Gandhi ex Karthick, *var. nov.*

Replaced designation: “*Fragilaria construens* var. *indica* H.P.Gandhi” (Gandhi 1998: 298).

Description: Gandhi (1998: 298).

Holotype: Gandhi (1998: 307, pl. 4: fig. 10, a line drawing of valve view of the specimen).

Type locality: India: Kashmir: Baltal, Romushi River Valley.

Fragilaria leptostauron* var. *neotrigona Guiry & Karthick, *var. nov.*

Replaced designation: “*Fragilaria leptostauron* var. *trigona* H.P.Gandhi” (Gandhi 1998: 303).

Description: Gandhi (1998: 303).

Holotype: Gandhi (1998: 307, pl. 4: fig. 39, a line drawing of valve view of the specimen).

Type locality: India: Kashmir: Baltal, Romushi River Valley Karewa Beds (Plio-Pleistocene).

Note: Validation of “*Fragilaria leptostauron* var. *trigona* H.P.Gandhi” would create a later homonym of *Fragilaria leptostauron* var. *trigona* (Krasske) Lange-Bertalot & Willmann (Lange-Bertalot *et al.* 1996: 83).

Gomphonema clavatoides* var. *rostratum H.P.Gandhi ex Karthick, *var. nov.*

Replaced designation: “*Gomphonema clavatoides* var. *rostrata* [*sic*] H.P.Gandhi” (Gandhi 1998: 27).

Description: Gandhi (1998: 27).

Holotype: Gandhi (1998: 39, pl. II: fig. 43, a line drawing of valve view of the specimen).

Type locality: India: Gujarat: Lake Chandola.

Hantzschia amphioxys* var. *rectiformis H.P.Gandhi ex Karthick, *var. nov.*

Replaced designation: “*Hantzschia amphioxys* var. *rectiformis* H.P.Gandhi” (Gandhi 1998: 160).

Description: Gandhi (1998: 160).

Holotype: Gandhi (1998: 151, pl. II: fig. 82, a line drawing of valve view of the specimen).

Type locality: India: Gujarat: Baroda.

Navicula agrestiformis H.P.Gandhi ex Karthick, *sp. nov.*

Replaced designation: “*Navicula agrestiformis* H.P.Gandhi” (Gandhi 1998: 162).

Description: Gandhi (1998: 162).

Holotype: Gandhi (1998: 159, pl. III: fig. 93, a line drawing of valve view of the specimen).

Type locality: India: Gujarat: Baroda.

Navicula barodensis H.P.Gandhi ex Karthick, *sp. nov.*

Replaced designation: “*Navicula barodensis* H.P.Gandhi” (Gandhi 1998: 163).

Description: Gandhi (1998: 163).

Holotype: Gandhi (1998: 193, pl. V: fig. 147, a line drawing of valve view of the specimen).

Type locality: India: Gujarat: Baroda.

Navicula buderiformis H.P.Gandhi ex Karthick, *sp. nov.*

Replaced designation: “*Navicula buderiformis* H.P.Gandhi” (Gandhi 1998: 164).

Description: Gandhi (1998: 165).

Holotype: Gandhi (1998: 159, pl. III: fig. 94, a line drawing of valve view of the specimen).

Type locality: India: Gujarat: Baroda.

Navicula chauhanii H.P.Gandhi ex Karthick, *sp. nov.*

Replaced designation: “*Navicula chauhanii* H.P.Gandhi” (Gandhi 1998: 166).

Description: Gandhi (1998: 166).

Holotype: Gandhi (1998: 189, pl. IV: fig. 127, a line drawing of valve view of the specimen).

Type locality: India: Gujarat: Baroda.

Note: Named for the collector, A.R. Chauhan.

***Navicula confervacea* var. *laterostrata* H.P.Gandhi ex Karthick, var. nov.**Replaced designation: “*Navicula confervacea* var. *laterostrata* H.P.Gandhi” (Gandhi 1998: 169).

Description: Gandhi (1998: 169).

Holotype: Gandhi (1998: 159, pl. III: fig. 98, a line drawing of valve view of the specimen).

Type locality: India: Gujarat: Baroda.

***Navicula confervacea* var. *tenuis* H.P.Gandhi ex Karthick, var. nov.**Replaced designation: “*Navicula confervacea* var. *tenuis* H.P.Gandhi” (Gandhi 1998: 170).

Description: Gandhi (1998: 170).

Holotype: Gandhi (1998: 159, pl. III: fig. 99, a line drawing of valve view of the specimen).

Type locality: India: Gujarat: Baroda.

***Navicula graciloides* var. *barodensis* H.P.Gandhi ex Karthick, var. nov.**Replaced designation: “*Navicula graciloides* var. *barodensis* H.P.Gandhi” (Gandhi 1998: 175).

Description: Gandhi (1998: 175).

Holotype: Gandhi (1998: 193, pl. V: fig. 165, a line drawing of valve view of the specimen).

Type locality: India: Gujarat: Baroda.

***Navicula halophila* var. *fogedii* H.P.Gandhi ex Karthick, var. nov.**Replaced designation: “*Navicula halophila* var. *fogedii* H.P.Gandhi” (Gandhi 1998: 177).

Description: Gandhi (1998: 177).

Holotype: Gandhi (1998: 151 pl. II: fig. 87, a line drawing of valve view of the specimen).

Type locality: India: Gujarat: Baroda.

Note: Named for Niels Foged (1906-1988), Danish diatomist.

***Navicula lunulifera* H.P.Gandhi ex Karthick, sp. nov.**Replaced designation: “*Navicula lunulaefera* [sic] H.P.Gandhi” (Gandhi 1998: 102).

Description: Gandhi (1998: 102).

Holotype: Gandhi (1998: 111 pl. II: fig. 42, a line drawing of valve view of the specimen).

Type locality: India: Gujarat: Kharicut Canal, Vatva, Ahmedabad.

Note: the epithet “*lunulaefera*” has been corrected in accordance with ICN Art. 60.10.***Navicula mediocris* var. *barodensis* H.P.Gandhi ex Karthick, var. nov.**Replaced designation: “*Navicula mediocris* var. *barodensis* H.P.Gandhi” (Gandhi 1998: 178).

Description: Gandhi (1998: 179).

Holotype: Gandhi (1998: 159, pl. III: fig. 109, a line drawing of valve view of the specimen).

Type locality: India: Gujarat: Baroda.

***Navicula menisculus* var. *tenuis* H.P.Gandhi ex Karthick, var. nov.**Replaced designation: “*Navicula menisculus* var. *tenuis* H.P.Gandhi” (Gandhi 1998: 102).

Description: Gandhi (1998: 102).

Holotype: Gandhi (1998: 111, pl. II: fig. 44, a line drawing of valve view of the specimen).

Type locality: India: Gujarat: Kharicut Canal, Vatva, Ahmedabad.

***Navicula gujaratensis* Guiry & Karthick, sp. nov.**Replaced designation: “*Navicula ovata* H.P.Gandhi” (Gandhi 1998: 180).

Description: Gandhi (1998: 180).

Holotype: Gandhi (1998: 159, pl. III: fig. 112, a line drawing of valve view of the specimen).

Type locality: India: Gujarat: Baroda.

Note: Validation of “*Navicula ovata* H.P.Gandhi” would create a later homonym for *Navicula ovata* (Grunow) Schütt (Schütt 1896: 129), and a new name is thus required. *Navicula ovata* M. Peragallo (in Héribaude-Joseph 1893: 233) appears to be an invalid name as no description or illustration was provided at this time.

Navicula canali-kharicutensis Guiry & Karthick, *nom. nov.*

Replaced synonym: “*Navicula muraliformis* H.P.Gandhi” (Gandhi 1998: 103).

Description: Gandhi (1998: 103).

Holotype: Gandhi (1998: 111, pl. II: fig. 45 a line drawing of valve view of the specimen).

Type locality: India: Gujarat: Kharicut Canal, Vatva, Ahmedabad.

Note: Validation of “*Navicula muraliformis* H.P.Gandhi” (Gandhi 1998: 103) would create a later homonym for *Navicula muraliformis* Hustedt (Hustedt 1949: 85, pl. IV: figs. 31, 32).

Fallacia pygmaea var. linearis Karthick, *var. nov.*

Replaced designation: “*Navicula pygmaea var. linearis* H.P.Gandhi” (Gandhi 1998: 181).

Description: Gandhi (1998: 181).

Holotype: Gandhi (1998: 193, pl. V: fig. 177, a line drawing of valve view of the specimen).

Type locality: India: Gujarat: Baroda.

Note: Validation of “*Navicula pygmaea var. linearis* H.P.Gandhi” (Gandhi 1998: 181) would have created a later homonym for *Navicula pygmaea var. linearis* Cleve-Euler (Cleve-Euler 1915: 26). However, this taxon is correctly referred to the genus *Fallacia* where this name is not pre-occupied.

Fallacia pygmaea var. rhomboidea Karthick, *var. nov.*

Replaced designation: “*Navicula pygmaea var. rhomboidea* H.P.Gandhi” (Gandhi 1998: 182).

Description: Gandhi (1998: 182).

Holotype: Gandhi (1998: 193, pl. V: fig. 179, a line drawing of valve view of the specimen).

Type locality: India: Gujarat: Baroda.

Note: This taxon is correctly referred to the genus *Fallacia*.

Navicula sacrophagus H.P.Gandhi ex Karthick, *sp. nov.*

Replaced designation: “*Navicula sacrophagus* H.P.Gandhi” (Gandhi 1998: 48).

Description: Gandhi (1998: 48).

Holotype: Gandhi (1998: 59, pl. III: fig. 111, a line drawing of valve view of the specimen).

Type locality: India: Gujarat: Lake Chandola.

Navicula simplexoides H.P.Gandhi ex Karthick, *sp. nov.*

Replaced designation: “*Navicula simplexoides* H.P.Gandhi” (Gandhi 1998: 50).

Description: Gandhi (1998: 50).

Holotype: Gandhi (1998: 59, pl. III: fig. 115, a line drawing of valve view of the specimen).

Type locality: India: Gujarat: Lake Chandola.

Navicula lacus-chandolensis Guiry & Karthick, *sp. nov.*

Replaced designation: “*Navicula subgrimmei* H.P.Gandhi” (Gandhi 1998: 51).

Description: Gandhi (1998: 51).

Holotype: Gandhi (1998: 59, pl. III: fig. 117, a line drawing of valve view of the specimen).

Type locality: India: Gujarat: Lake Chandola.

Note: Validation of “*Navicula subgrimmei* H.P.Gandhi” (Gandhi 1998: 51) would create a later homonym for *Navicula subgrimmei* Messikommer (Messikommer 1949: 243, pl. I: fig. 3).

Navicula sublanceolata H.P.Gandhi ex Karthick, *sp. nov.*

Replaced designation: “*Navicula sublanceolata* H.P.Gandhi” (Gandhi 1998: 106).

Description: Gandhi (1998: 106).

Holotype: Gandhi (1998: 111, pl. II: fig. 51, a line drawing of valve view of the specimen).

Navicula tridentula* var. *indica H.P.Gandhi ex Karthick, *var. nov.*

Replaced designation: “*Navicula tridentula* var. *indica* H.P.Gandhi” (Gandhi 1998: 191).

Description: Gandhi (1998: 191).

Holotype: Gandhi (1998: 159, pl. III: fig. 119, a line drawing of valve view of the specimen).

Type locality: India: Gujarat: Baroda.

Nitzschia aerophiloides H.P.Gandhi ex Karthick, *sp. nov.*

Replaced designation: “*Nitzschia aerophiloides* H.P.Gandhi” (Gandhi 1998: 199).

Description: Gandhi (1998: 199).

Holotype: Gandhi (1998: 197, pl. VI: fig. 189, a line drawing of valve view of the specimen).

Type locality: India: Gujarat: Baroda.

Nitzschia chandolensis H.P.Gandhi ex Karthick, *sp. nov.*

Replaced designation: “*Nitzschia chandolensis* H.P.Gandhi” (Gandhi 1998: 60).

Description: Gandhi (1998: 60).

Holotype: Gandhi (1998: 59, pl. III: fig. 132, a line drawing of valve view of the specimen).

Type locality: India: Gujarat: Lake Chandola.

Nitzschia chauhanii H.P.Gandhi ex Karthick, *sp. nov.*

Replaced designation: “*Nitzschia chauhanii* H.P.Gandhi” (Gandhi 1998: 204).

Description: Gandhi (1998: 204).

Holotype: Gandhi (1998: 197, pl. VI: fig. 192, a line drawing of valve view of the specimen).

Type locality: India: Gujarat: Baroda.

Note: Named for the collector of the original material, A.R. Chauhan.

Nitzschia mancoides H.P.Gandhi ex Karthick, *sp. nov.*

Replaced designation: “*Nitzschia mancoides* H.P.Gandhi” (Gandhi 1998: 212).

Description: Gandhi (1998: 212).

Holotype: Gandhi (1998: 227, pl. VII: fig. 266, a line drawing of valve view of the specimen).

Type locality: India: Gujarat: Baroda.

Nitzschia palea* var. *barodensis H.P.Gandhi ex Karthick, *var. nov.*

Replaced designation: “*Nitzschia palea* var. *barodensis* H.P.Gandhi” (Gandhi 1998: 213).

Description: Gandhi (1998: 213).

Holotype: Gandhi (1998: 227, pl. VII: fig. 268, a line drawing of valve view of the specimen).

Type locality: India: Gujarat: Baroda.

Nitzschia subaccommodata H.P.Gandhi ex Karthick, *sp. nov.*

Replaced designation: “*Nitzschia subaccommodata* H.P.Gandhi” (Gandhi 1998: 218).

Description: Gandhi (1998: 218).

Holotype: Gandhi (1998: 197, pl. VI: fig. 219, a line drawing of valve view of the specimen).

Type locality: India: Gujarat: Baroda.

Nitzschia subapiculata H.P.Gandhi ex Karthick, *sp. nov.*

Replaced designation: “*Nitzschia subapiculata* H.P.Gandhi” (Gandhi 1998: 123).

Description: Gandhi (1998: 123).

Holotype: Gandhi (1998: 111, pl. II: fig. 70, a line drawing of valve view of the specimen).

Type locality: India: Gujarat: Kharicut Canal, Vatva, Ahmedabad.

Nitzschia sublaevis H.P.Gandhi ex Karthick, *sp. nov.*

Replaced designation: “*Nitzschia sublaevis* H.P.Gandhi” (Gandhi 1998: 220).

Description: Gandhi (1998: 220).

Holotype: Gandhi (1998: 197, pl. VI: fig. 220, a line drawing of valve view of the specimen).

Type locality: India: Gujarat: Baroda.

Nitzschia sublica H.P.Gandhi ex Karthick, *sp. nov.*

Replaced designation: “*Nitzschia sublica* H.P.Gandhi” (Gandhi 1998: 124).

Description: Gandhi (1998: 124).

Holotype: Gandhi (1998: 111, pl. II: fig. 71, a line drawing of valve view of the specimen).

Type locality: India: Gujarat: Kharicut Canal, Vatva, Ahmedabad.

Nitzschia sublongirostris H.P.Gandhi ex Karthick, *sp. nov.*

Replaced designation: “*Nitzschia sublongirostris* H.P.Gandhi” (Gandhi 1998: 72).

Description: Gandhi (1998: 72).

Holotype: Gandhi (1998: 59, pl. III: fig. 171, a line drawing of valve view of the specimen).

Type locality: India: Gujarat: Lake Chandola.

Nitzschia thermalis* var. *capitata H.P.Gandhi ex Karthick, *var. nov.*

Replaced designation: “*Nitzschia thermalis* var. *capitata* H.P.Gandhi” (Gandhi 1998: 222).

Description: Gandhi (1998: 222).

Holotype: Gandhi (1998: 197, pl. VI: figs 228, a line drawing of valve view of the specimen).

Type locality: India: Gujarat: Baroda.

Nitzschia woltereckoides H.P.Gandhi ex Karthick, *sp. nov.*

Replaced designation: “*Nitzschia woltereckoides* H.P.Gandhi” (Gandhi 1998: 75).

Description: Gandhi (1998: 75).

Holotype: Gandhi (1998:59, pl. III: figs 174, a line drawing of valve view of the specimen).

Type locality: India: Gujarat: Lake Chandola.

Pinnularia borealis* var. *barodensis H.P.Gandhi ex Karthick, *var. nov.*

Replaced designation: “*Pinnularia borealis* var. *barodensis* H.P.Gandhi” (Gandhi 1998: 225).

Description: Gandhi (1998: 225).

Holotype: Gandhi (1998: 227, pl. VII: fig. 286, a line drawing of valve view of the specimen).

Type locality: India: Gujarat: Baroda.

Pleurosigma chandolense H.P.Gandhi ex Karthick, *sp. nov.*

Replaced designation: “*Pleurosigma chandolensis* [*sic*] H.P.Gandhi” (Gandhi 1998: 75).

Description: Gandhi (1998: 75).

Holotype: Gandhi (1998: 58, pl. III: fig. 176, a line drawing of valve view of the specimen).

Type locality: India: Gujarat: Lake Chandola.

Note: “*Pleurosigma*” is neuter.

Stauroneis gandhii Guiry & Karthick, *sp. nov.*

Replaced designation: “*Stauroneis truncata* H.P.Gandhi” (Gandhi 1998: 230).

Description: Gandhi (1998: 230).

Holotype: Gandhi (1998: 159, pl. III: fig. 122, a line drawing of valve view of the specimen).

Type locality: India: Gujarat: Baroda.

Note: Validation of “*Stauroneis truncata* H.P.Gandhi” (Gandhi 1998: 203) would create a later homonym for *Stauroneis truncata* (Rabenhorst) Ralfs (in Pritchard 1861: 914).

Synedra gandhii Guiry & Karthick, *sp. nov.*

Replaced designation: “*Synedra cuneata* H.P.Gandhi” (Gandhi 1998: 81).

Description: Gandhi (1998: 81).

Holotype: Gandhi (1998: 77, pl. IV: fig. 200, a line drawing of valve view of the specimen).

Type locality: India: Gujarat: Lake Chandola.

Note: Validation of “*Synedra cuneata* H.P.Gandhi” (Gandhi 1998: 81) would create a later homonym for *Synedra cuneata* (Lyngbye) Ehrenberg (Ehrenberg 1834: 272).

Dorofeyukia grimmeoides Ács, Buczkó & Ector

Trábert & al. (2019: 749), recognising that the designation “*Navicula grimmeoides* [*sic*] H.P.Gandhi” was invalid, formally designated a lectotype (Gandhi 1998: 39, pl. II: figs 73-55) for it, provided a description in English, and referred to an illustration of the type, supposedly thus validating the name. However, ICN Art. 33.1 stipulates that a name “name must always be explicitly accepted in the place of its valid publication.” As these authors did not accept this taxon as a *Navicula*, the designation “*Navicula grimmeoides* [*sic*] H.P.Gandhi” is still invalid. However, Ács, Buczkó & Ector (in Trábert & al. 2019: 756) in introducing a new name—*Dorofeyukia grimmeoides* Ács, Buczkó & Ector—that they did accept taxonomically, validated the name as there is a description in English and reference to a type, but the name should be solely credited to Ács, Buczkó & Ector.

Navicula subelata H.P.Gandhi is valid as it was introduced as a new name for *Navicula elata* H.P.Gandhi (Gandhi 1970: 774, pl. III: fig. 73), *nom. illeg., non Navicula elata* Leuduger-Fortmorel (Leuduger-Fortmorel 1879: 27, pl. III: fig. 28). No nomenclatural action is therefore required.

Navicula pseudofrugalis H.P.Gandhi, *nom. illeg.*, whilst valid, is a superfluous, illegitimate substitute name for *Navicula lenzii* Krasske (Krasske 1939: 556, pl. XIX: figs 11, 12). No nomenclatural action is required as *Navicula lenzii* Krasske is a valid and legitimate name.

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