

Nomenclatural notes on some Asian asymmetrical *Trachelomonas* Ehrenberg (*Euglenophyceae*) taxa

Anatoliy Levanets¹ & Dmitry Kapustin²

¹Unit for Environmental Sciences and Management, North-West University, Potchefstroom, South Africa (correspondence: 20868421@nwu.ac.za)

²K.A. Timiryazev Institute of Plant Physiology, Russian Academy of Sciences, Botanicheskaya St. 35, 127276 Moscow, Russian Federation

Trachelomonas asymmetrica Kisselev was described from the howzes (ponds) of Old Bukhara, Uzbekistan (Kisselev 1931: 76, pl. 2: fig. 17). However, this name is a later homonym of *Trachelomonas asymmetrica* Y.V.Roll (1928: 163: fig. 3), and thus is illegitimate (ICN Principle III, Art. 53.1, Turland & al. 2018). Popova (1955: 110) treated *T. asymmetrica* Kisselev as a variety as *T. granulata* var. *asymmetrica* T.G.Popova but later (Popova 1966) changed her mind and retained this taxon as a distinct species.

Here we propose to update some names of asymmetrical Asian *Trachelomonas* Ehrenberg, 1834 taxa that require nomenclatural revision in accordance with the ICN (Turland & al. 2018).

Trachelomonas kisselevii Levanets & Kapustin, *nom. nov.*

Replaced name: *Trachelomonas asymmetrica* Kisselev *Trudy Sredne-Aziatskogo Gosudarstvennogo Universiteta [Tashkent], ser. XII-a, Geografia* 9: 76, pl. 2: fig. 17, *nom. illeg.* 1931. Priority for *Trachelomonas asymmetrica* Y.V.Roll (1928: 163).

Lectotype (**designated here**): [icon!] Kisselev 1931: pl. 2: fig. 17.

Description: Outline shape asymmetrical, one side of the body is more developed than another. The cell is dilated or enlarged in basal part, but then sharply tapered at the flagellum opening. Long 24–29 μm , width 20–21 μm , the opening 6.5 μm wide. Popova (1955: 110) characterised lorica shape as obovate, unequally-sided, with rounded posterior end, extended towards the anterior end.

Registration (of name): <http://phycobank.org/105057>

Registration (of lectotype): <http://phycobank.org/105060>

Syntype localities: Howzes [ponds] of Old Buchara, 1924, 1926 [Uzbekistan].

Eponymy: The species name honours Ivan Aleksandrovich Kisselev (1888–1979), noted Russian hydrobiologist and phycologist, who made many important contributions to phytoplankton studies in the former Soviet Union.

Note: Popova (1955: 110), based on the description of *T. asymmetrica* Kisselev, proposed a new name at a new rank for this species, *Trachelomonas granulata* var. *asymmetrica* T.G.Popova.

Trachelomonas kisselevii var. ***crenulata*** (A.K.Islam) Levanets & Kapustin, *comb. nov.*

Basionym: *Trachelomonas asymmetrica* var. *crenulata* A.K.Islam (in Islam & Muniruzzaman) *Internationale Revue der gesamten Hydrobiologie und Hydrographie* 66: 112, pl. 3: fig. 112, 1981 (as '*Trachelomonas asymmetrica* Kisselev var. *crenulata*')

Holotype: Pl. 3: fig. 112.

Registration: <http://phycobank.org/105058>

Type locality: Shantinagar, Dacca, Bangladesh; pond.

Islam, A.K.M.N. & Muniruzzaman, K. (1981). Euglenophyta of Bangladesh. I. Genus *Trachelomonas* Ehr. *Internationale Revue der gesamten Hydrobiologie und Hydrographie* 66(1): 109–125, 7 pls.



- Kisselev, I.A. (1931). Opyt gidrobiologicheskoi charakteristiki tipovykh vodoemov Srednei Azii [Materialen zur hydrobiologischen Charakteristik einiger typischen Wasserbecken Mittelasiens]. *Trudy Sredne-Aziatskogo Gosudarstvennogo Universiteta* [Tashkent], ser. XII-a, Geografiya 9 [Acta Universitatis Asiae Mediae, Series XII-a, Geographia, Fasciculus 9]: 1–85, 8 pls. [in Russian: Киселев И.А. (1931). Опыт гидробиологической характеристики типовых водоемов Средней Азии. *Труды Средне-Азиатского государственного университета*, Серия XII-a, География, Выпуск 9: 1–85].
- Popova, T.G. (1955). *Opredelitel' presnovodnykh vodorosley SSSR. Evglenovyye vodorosli* [Manual for identification of the freshwater algae of the USSR. Euglenids]. Vol. 7 pp. [1]–281 [282], 119 figs. Moscow: Sovetskaya Nauka [in Russian: Попова Т.Г. (1955). *Определитель пресноводных водорослей СССР. Выпуск 7. Эвгленовые водоросли*. Москва: Советская наука, 282 с.].
- Popova, T.G. (1966). *Flora Plantarum Cryptogamarum URSS. Vol. 8. Euglenophyta. Fasc. 1. Gen. Trachelomonas, Strombomonas, Eutreptia, Euglena*. pp. 1–412. Moscow, Leningrad: Nauka [in Russian: Попова Т.Г. (1966). *Флора споровых растений СССР. Т. 8. Эвгленовые водоросли. Вып. 1. Роды Trachelomonas, Strombomonas, Eutreptia, Euglena*. Москва, Ленинград: Наука, 412 с.].
- Roll, Y.V. (1928). Algues nouvelles, trouvées dans le plancton de la rivière Dniepre. *Annales de Protistologie* 1(4): 163–166, 9 figs. [in French and Latin].
- Turland, N.J., Wiersema, J.H., Barrie, F.R., Greuter, W., Hawksworth, D.L., Herendeen, P.S., Knapp, S., Kusber, W.-H., Li, D.-Z., Marhold, K., May, T.W., McNeill, J., Monro, A.M., Prado, J., Price, M.J. & Smith, G.F., editors (2018). *International Code of Nomenclature for algae, fungi, and plants (Shenzhen Code)* adopted by the Nineteenth International Botanical Congress Shenzhen, China, July 2017. *Regnum Vegetabile*, Vol. 159. pp. [i]–xxxviii, 1–253. Glashütten: Koeltz Botanical Books.