

The high-mountain species *Staurophora vilamaensis* N.I.Maidana, C.Seeligmann & M.R.Morales, *sp. nov.* (*Anomoeoneidaceae*, *Bacillariophyta*)

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Staurophora Mereschowsky, 1903, *nom. cons.* is a genus characteristic of marine and brackish environments (Bahls, 2011). It is also a notable feature of the diatom flora of the high-altitude lakes of the Central Andes (South America), which have variable salinities, and where at least three species have been found thus far [*S. elata* (Hustedt) D.G.Mann, *S. wislouchii* (Poretzky & Anisimova) D.G.Mann (Maidana & al., 1998, as *Stauroneis wislouchii* Poretzky & Anisimova) together with an undescribed species referred to as “*Staurophora vilamae*” in Maidana & al. (2009). This latter taxon has been found not only at the type locality (Laguna Vilama, Jujuy, Argentina, c. 4500 m asl) but also in other lakes and meadows, from oligohaline to mesohaline, in north-western Argentina (Maidana & Seeligmann 2015) and in two lakes in Bolivia (Alvarez-Blanco & al. 2011)

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Designation: “*Staurophora vilamae*” N.I.Maidana, C.Seeligmann & M.Morales, *inval.* (ICN, Art. 40.1, 40.6; Turland & al. 2018)

Registration: <http://phycobank.org/103902>

Holotype: ARGENTINA: Prov. Jujuy: Laguna Vilama, Specimen in Slide LIL 3122 in Herbario Ficológico Fundación Miguel Lillo, Tucumán Argentina, 15 January 2005, leg. C. Seeligmann.

Type locality: Laguna Vilama, Jujuy, Argentina. 22°34'14" S 66°52'29" W, alt. 4543 m a.s.l.- Figures (representative of the type): Maidana & al. (2009: figs. 3K, 4D–H).

Latin description (adapted from Maidana & al. 2009: 269): Valvae lineares lanceolatae, extremis rotundis, subrostratis aut rostratis. Area axialis linealis, maxime angusta, area centralis maxime variabilis parum extensa, striis variabile separatu atque longitudine conditionis irregularis. Area centralis fasciam formans nec latam nec angustam parum dilatam ad margines ibi interdum cum paucis striis curtissimis. Striae parum radiatae magna ex parte valvarum. Puncta striarum vix discernanada microscopio photonico, foramina punctiformia aspectabilia microscopio electronico. Longitudo: 37.1–48.3 µm; latitudo: 9.4–11.5 µm; 16–31 striae in 10 µm; 5–5.5 areolae in 1 µm.

English description (translated from Maidana & et al., 2009: 269–270): Valves linear lanceolate with rounded, subrostrate or rostrate ends. Axial area linear, very narrow, central area very variable, slightly widened, with variably spaced striae of irregular length. Central area more or less distinct, interrupted by striae of variable length. Striae weakly radial over most of the valve, slightly denser on the mantle than on the valve surface. Areoles minute, dot-like. Length: 37.1–48.3 µm; width: 9.4–11.5 µm; 16–31 striae in 10 µm; 5–5.5 areoles in 1 µm.

Etymology: The epithet is a reference to the first of the lakes where this new species was found (Laguna Vilama, Argentina).

Álvarez-Blanco, I., Cejudo-Figueiras, C., de Godos, I., Muñoz, R. & Blanco, S. (2011). Las



diatomeas de los salares del Altiplano boliviano: singularidades florísticas. Boletín de la Sociedad Española de Historia Natural, Sec. Biol. 105 (1-4): 67–82.

Bahls, L. (2011). *Staurophora*. In *Diatoms of North America*. Retrieved July 13, 2023, from <https://diatoms.org/genera/staurophora>

Maidana, N. I., Vigna, M. S. & Mascitti, V. (1998). Ficoflora de la laguna de Pozuelos (Jujuy, Argentina). I: Bacillariophyceae Boletín de la Sociedad Argentina de Botánica 33(3-4): 171–179

Maidana, N. I., Seeligmann, C. & Morales, M. [R.] (2009). Bacillariophyceae del complejo lagunar Vilama (Jujuy, Argentina). Boletín de la Sociedad Argentina de Botánica 44(3-4): 257–271.

Maidana, N. I. y Seeligmann, C. T. (2015). Diatomeas (Bacillariophyceae) en humedales de altura de la provincia de Catamarca (Argentina). III. Boletín de la Sociedad Argentina de Botánica 50: 447–466.

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.