

Validation of two algal names: *Mallomonas camerunensis* and *Mallomonas cronbergiae* (Chrysophyceae, Stramenopiles)

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Abstract. Two invalidly published chrysophyte species names, *Mallomonas camerunensis* and *Mallomonas cronbergiae*, are validated.

Key words: algae, chrysophytes, *Mallomonas*

Introduction

The genus *Mallomonas* includes scaled chrysophyte species that are widely distributed in the freshwaters of the world. There is growing interest in this genus and new species are described almost every year. Recently, Piątek (2015) and Piątek & Łukaszek (2016) attempted to name two new species from Cameroon (Africa). The two names were not validly published because an illustration was designated as the holotype in both cases, and after 1 January 2007, a holotype must be a specimen (Art. 40.4, ICNafp, Turland et al. 2018). It is worth mentioning that specimens were available for both species including wet samples preserved in Lugol's solution and mounted on SEM holders deposited in the Department of Phycology, W. Szafer Institute of Botany, Polish Academy of Sciences. Therefore, the following validations are necessary.

Mallomonas camerunensis J. Piątek, sp. nov.

Synonym: *Mallomonas camerunensis* J. Piątek, Polish Botanical Journal 60(2): 120, 2015 (nom. inval., Art. 40.4, ICNafp).

Holotype designated here: KRAM A-18, an SEM holder, deposited in the W. Szafer Institute of Botany, Polish Academy of Sciences, Kraków.

Type locality: Cameroon, East Region, Department of Haut-Nyong: between Ngolambélé and Dimako, ~2 km S of Ngolambélé, 21 km SW from Bertoua, 04°24'26"N, 13°35'52"E, elev. ~655 m a.s.l., 12 Dec. 2007, J. Piątek & M. Piątek.

Description (Art. 38.13, ICNafp). Piątek, Polish Botanical Journal 60(2): 120, 2015.

Illustration (Art. 44.2, ICNafp). Piątek, Polish Botanical Journal 60(2): Figure 10, p. 124, 2015.

Notes. Detailed description, LM and SEM illustrations are included in Piątek (2015).

Mallomonas cronbergiae J. Piątek, sp. nov.

Synonym: *Mallomonas cronbergiae* J. Piątek, in Piątek & Łukaszek, Polish Botanical Journal 61(2): 200, 2016 (nom. inval., Art. 40.4, ICNafp).

Holotype designated here: KRAM A-19, an SEM holder, deposited in the W. Szafer Institute of Botany, Polish Academy of Sciences, Kraków.

Type locality: Cameroon, East Region, Department of Lomet-Djérem: between Boni and Kagama, ~10 km SW of Bertoua, 04°30'38.2"N, 13°36'53.5"E, elev. ~652 m a.s.l., 12 Dec. 2007, J. Piątek & M. Piątek.

Description (Art. 38.13, ICNafp). Piątek & Łukaszek, Polish Botanical Journal 61(2): 200, 2016.

Illustration (Art. 44.2, ICNafp). Piątek, Polish Botanical Journal 60(2): Figure 8, p. 201, 2016.

Notes. Detailed description, LM and SEM illustrations are included in Piątek & Łukaszek (2016).

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