



Notes on the genus *Anisomeridium* (lichenized Ascomycotina) from Madeira and the Azores (Macaronesia)

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Abstract

Descriptions are presented for two new species found on Madeira and the Azores: *Anisomeridium macaronesticum* and *A. macropycnidiatum*. The differentiation from related species is discussed and a key to the genus *Anisomeridium* in Macaronesia is added.

Key words: biodiversity in lichens, ecology, key, new species, Portugal, taxonomy

Introduction

The lichenized ascomycetes of Macaronesia have received considerable attention in recent decades. A checklist of Macaronesian lichens and lichenicolous fungi with four additions was published by Hafellner (1995, 1999, 2002, 2005, 2008). For Madeira the foliicolous lichens were treated by Sérusiaux (1996), and a recent checklist was published by (Carvalho *et al.* 2008). Further information on lichens and lichenicolous fungi of Madeira was provided by Pišút (2009), Sérusiaux *et al.* (2007), Flakus & Kukwa (2011), Breuss (2012), Lücking & Breuss (2012), Aptroot & Schumm (2012) and van den Boom & Ertz (2014). A recent checklist for lichens and lichenicolous fungi of the Azores is provided by Gabriel (2008).

These sources indicate the following species of *Anisomeridium* (Müll. Arg.) M. Choisy, for Macaronesia: *A. biforme* (Borrer) R.C. Harris, *A. polypori* (Ellis & Everh.) M.E. Barr, *A. ranunculosporum* (Coppins & P. James) Coppins and *A. viridescens* (Coppins) R.C. Harris. During fieldwork on the Macaronesian islands Madeira, São Miguel and Terceira, the author collected several specimens of *Anisomeridium* that did not match any of these species, nor any other species treated in a world-wide key by Harris (1995) or in the most recent keys of *Anisomeridium* for Costa Rica (Aptroot *et al.* 2008) and Great Britain (Smith *et al.* 2009). Based on them, two species new to science are described below.

Materials and Methods

All specimens have been studied by conventional macro- and microscopical techniques with hand-cut sections mounted in tap water. Amyloid reactions were tested using Lugol's iodine solution (K/I). Voucher specimens are kept in the herbarium of P. van den Boom, holotype specimens are deposited in the herbarium of Berlin [B]. Distribution data for Macaronesia were taken from the checklists of the Canary Islands (Hernández-Pradrón & Pérez-Vargas 2010), Madeira (Carvalho *et al.* 2008) and the Azores (Gabriel 2008).

Taxonomy

Anisomeridium macaronesticum van den Boom *sp. nov.* (Fig. 1) Mycobank: MB 811451

3. Ascospores 1-septate (15–)17–22(–25) × 7–9(–10) µm (M) *A. macaronesium*
 - Ascospores 1-septate, smaller 4
4. Ascospores 12–17(–19) × 3.5–4.7 µm (A) *A. viridescens*
 - Ascospores 12–16 × 4.5–6 µm 5
5. Ascospores with an elongate lower cell and a short upper cell, with a median constriction (C)..... *A. ranunculosporum*
 - Ascospores with equal cells, or the lower cell shorter than the upper, without a median constriction (A,C).....*A. biforme*

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