



The Genus *Laetiporus* in Brazil

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INTRODUCTION

- Traditionally, the genus *Laetiporus* was composed of only two species: *L. sulphureus* (Bull.) Murrill and *L. persicinus* (Berk. & M.A. Curtis) Gilb. (1). Both very distinct in color and habit of grow but similar microscopically (dimitic and simple septa hyphae) and ecologically (brown rot fungus).

- In the 90's, a study on mating and molecular biology showed that *L. sulphureus* was a taxon hiding cryptic species sharing similar morphological traits but different ecological and geographical distribution (2).

- Subsequently studies on molecular biology of *L. sulphureus* worldwide started a revolution in the taxonomy of *Laetiporus* genus, with dozens of species been described (3-9).

- In Brazil three species of *Laetiporus* are registered. *L. sulphureus*, *L. persicinus* and *L. squalidus* R. Pires, Motato-Vásquez & Gugliotta (7).

MATERIAL & METHODS

New collections were made in the Atlantic Forest biome and herbaria collections were reviewed. Specimens were described macroscopically and microscopically using traditional methods, pictures and notes on ecological traits were taken, fresh materials were cultured and all collections had their DNA extracted, ITS, LSU and *tef1-α* sequences were amplified (10-12).

CONCLUSIONS

- We found that *L. sulphureus* (Bull.) Murrill doesn't occur in Brazil, previous collections determined as *L. sulphureus* are more related with *L. gilbertsonii* Burds. that grows on *Eucalyptus* sp. Some species were found growing on native trees and molecular biology could reveal that Brazilian species are a new to science.

- New collection and review of type specimen of *L. squalidus* revealed that probably we aren't dealing with a species of *Laetiporus* genus and taxon should be treated taxonomic giving it a new combination in a new genus.

- Those specimens usually identified as *L. persicinus* (Berk. & M.A. Curtis) Gilb. in Brazil correspond to recently described genus from Africa named *Kusaghiporia* (13). Collections from Brazil are very similar to those described as *Polyporus talpae* Cooke and its synonym *Meripilus talpae* (Cooke) D.A. Reid.

RESULTS

Forty-two specimens were studied, which 23 were new collections, including new hosts registration for them. Forty-two sequences of DNA were amplified (ITS: 16; LSU: 11; and *tef1-α*: 15). We confirmed three morphotypes occurring in Brazil presented in the figures next:

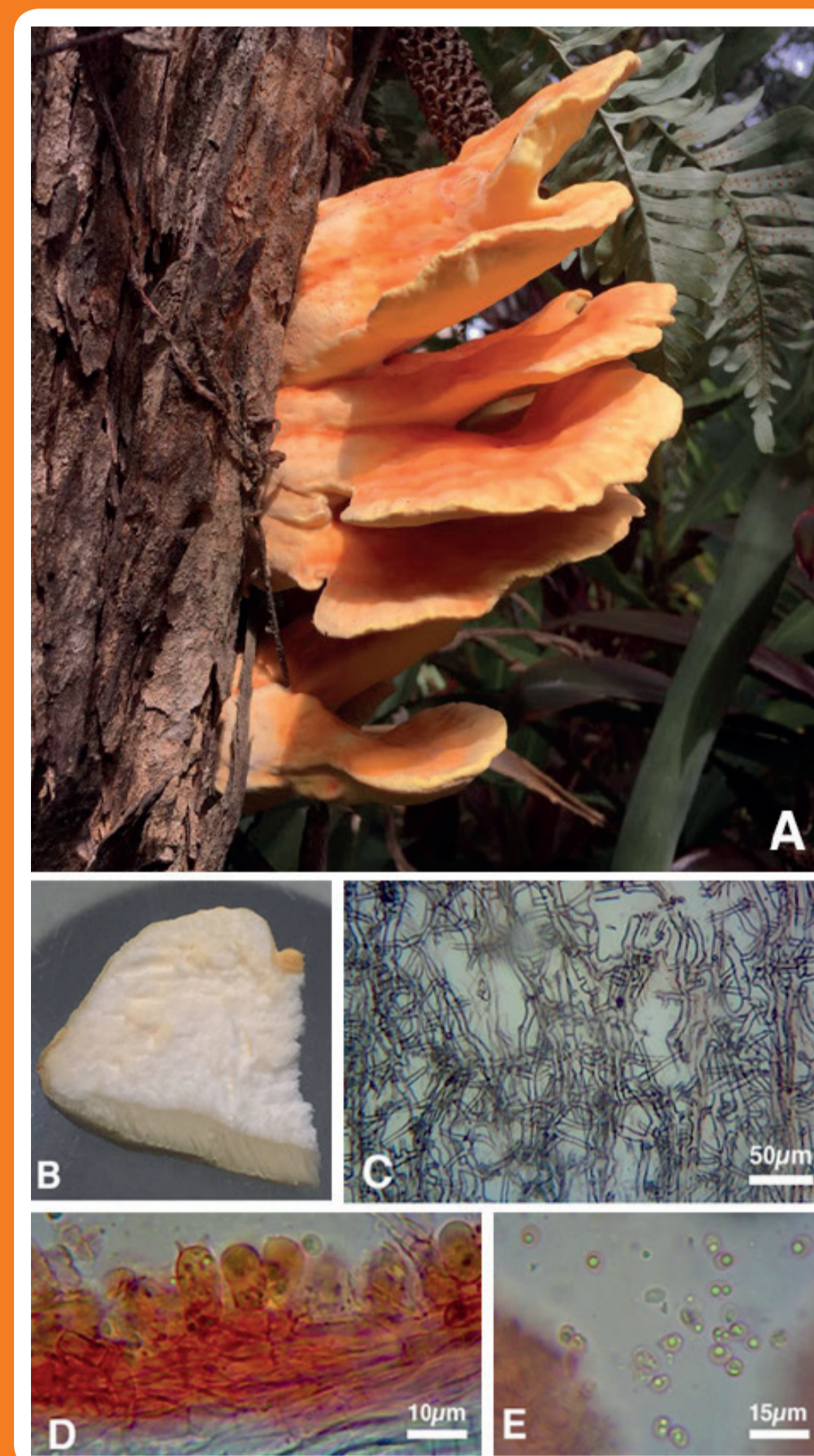


Figure 1. *L. gilbertsonii*

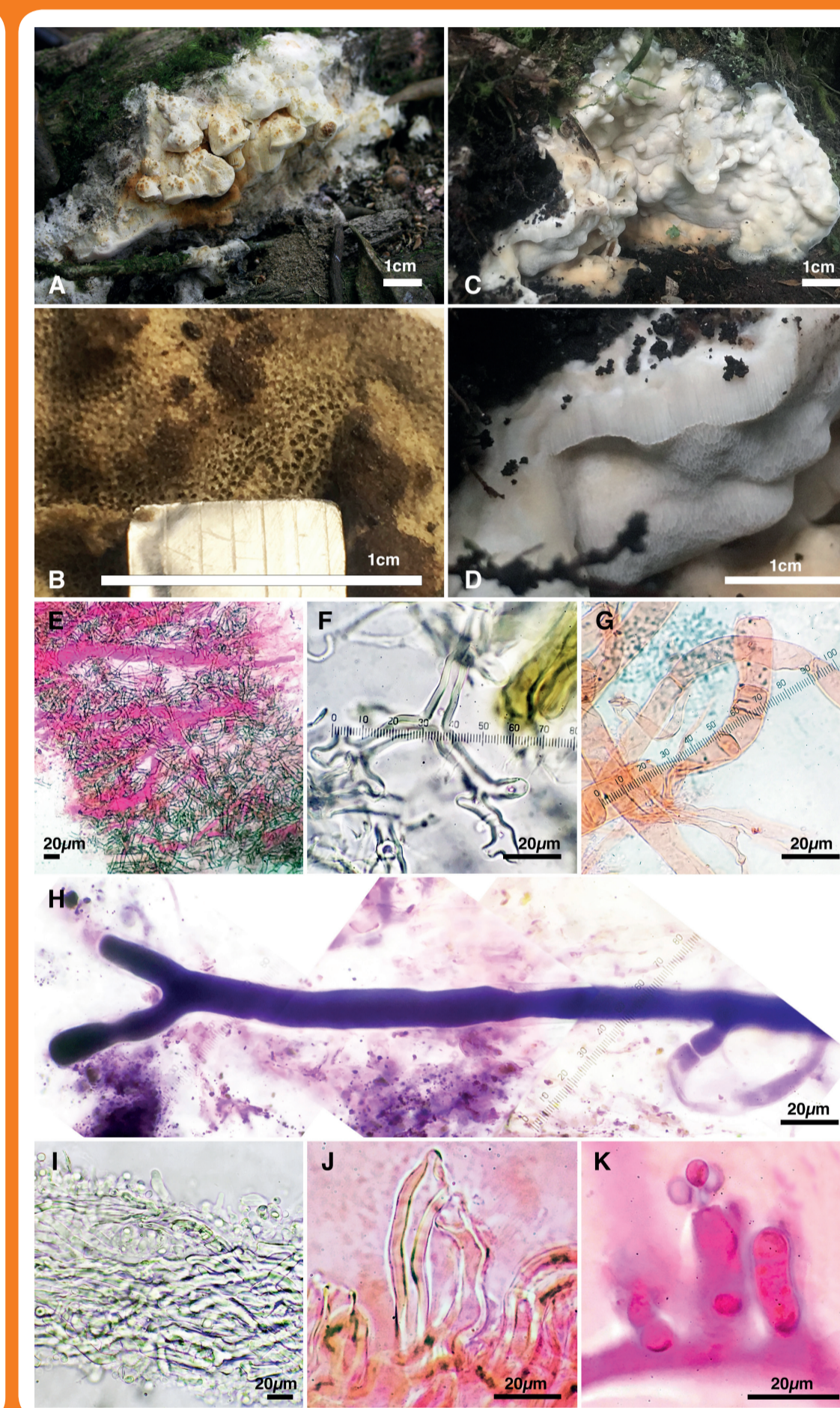


Figure 1. *L. squalidus*

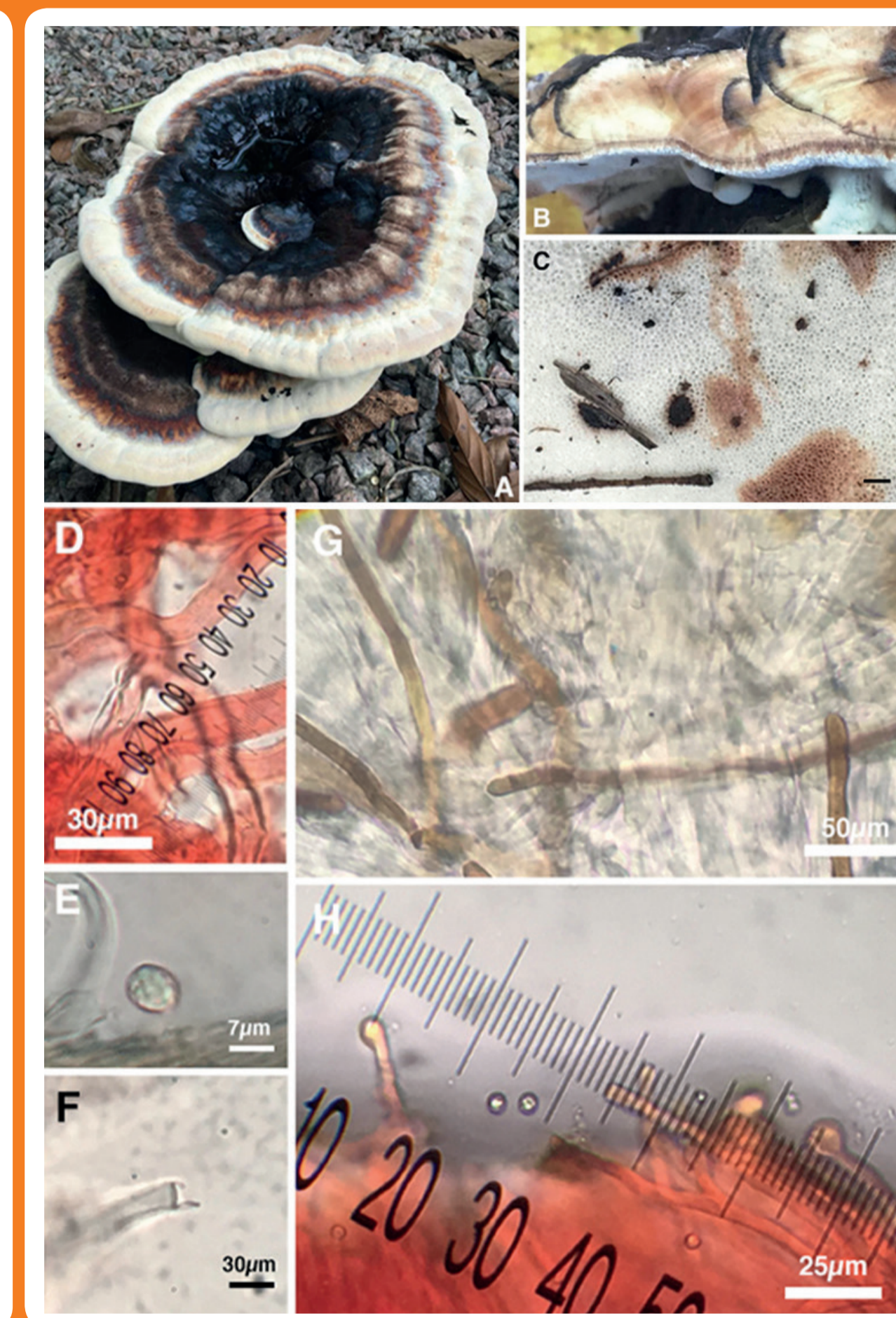


Figure 3. *Kusaghiporia* sp.

For a complete description of each taxa use the QR Code below or go to: <http://abre.ai/mindfunga>



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