




TCCE ICMBio / VALE


COMPENSAÇÃO ESPELEOLÓGICA

“Iron caves provide shelter for *Xylariales* and *Vermiculariopsiellales* (*Sordariomycetes*, *Ascomycota*) fungi in the Monumento Natural da Serra da Ferrugem, Minas Gerais”, apresentado pelo doutor Thiago Oliveira Condé.



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Promoção: sbmic
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Iron caves provide shelter for *Xylariales* and *Vermiculariopsiellales* (*Sordariomycetes*, *Ascomycota*) fungi in the Monumento Natural da Serra da Ferrugem, Minas Gerais

Thiago Oliveira Condé¹, Ana Flávia Leão¹, Fábio Alex Custódio², Olinto Liparini Pereira^{1,2}

(1) Departamento de Microbiologia, Universidade Federal de Viçosa, Viçosa, Minas Gerais, Brazil.
 (2) Departamento de Fitopatologia, Universidade Federal de Viçosa, Viçosa, Minas Gerais, Brazil.

BACKGROUND

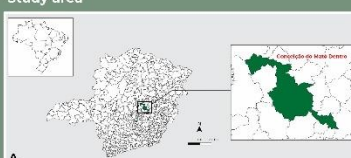
- ✓ The order *Xylariales* includes 21 families including well-known genera such as *Nigrospora*, *Pestalotiopsis* and *Xylaria*
- ✓ Dark perithecial stromata, melanised ascospores
- ✓ Saprophytic, endophytic or plant pathogens
- ✓ Caves offer constant and mild temperatures, absence of direct sunlight, and high humidity
- ✓ Setose conidiophores or conidia-bearing appendices

AIM


↓ Fungal isolates belonging to *Xylariales* and to the closely related order *Vermiculariopsiellales* were investigated using DNA sequences of the internal transcribed spacer regions (ITS) and intervening 5.8S rRNA.

METHODOLOGY

Study area



Sample collection



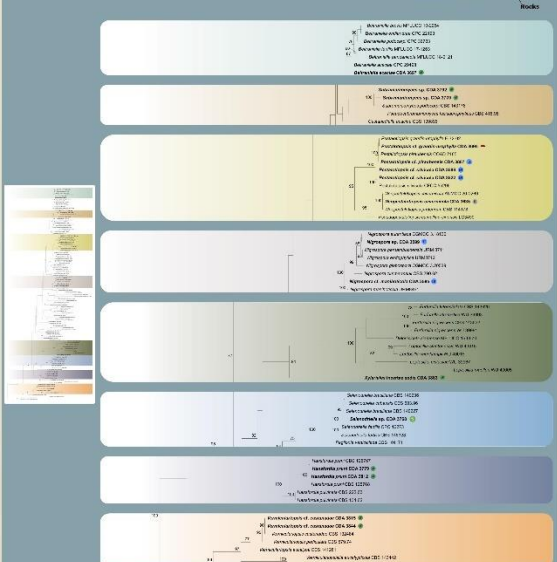
Fungal identification

BLAST → NCB → MAFFT → Maximum likelihood

RESULTS

Xylariales = 15 isolates
Vermiculariopsiellales = 2 isolates

Isolates by sample: 6 (Abóbora), 8 (Leaf litter), 1 (Soil)



Maximum-likelihood tree of *Xylariales* and *Vermiculariopsiellales* based on the ITS region of the rDNA. Isolates found in this study are shown in bold. Only bootstrap values > 90% are shown at branches.

CONCLUSIONS

- Further analyses incorporating additional loci such as LSU, SSU, and protein-coding genes will be performed
- Iron caves in Serra da Ferrugem may serve as reservoirs for *Xylariales* fungi, including potentially novel taxa


REFERENCES

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Zhao Z, Liu F, Shen X, et al (2018) *C. lasalei* reisolated from Karst caves in China, with description of 20 new species. *Persoonia* 39:1-31. <https://doi.org/10.37202/persoonia.2018.39.1>

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Termo de compromisso

Coordenação Executiva

Gestão Operacional

