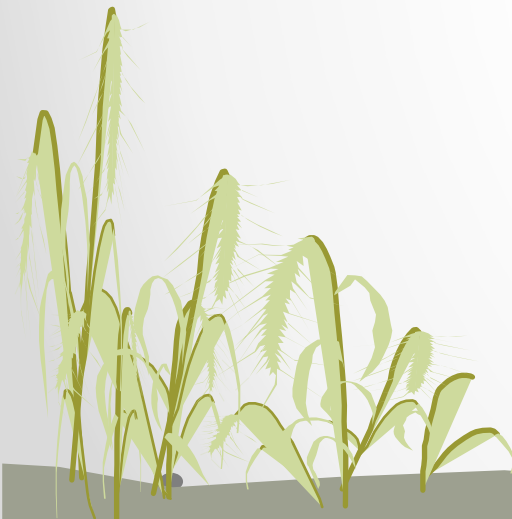




Symposium LEB 2020 (Parakou University)

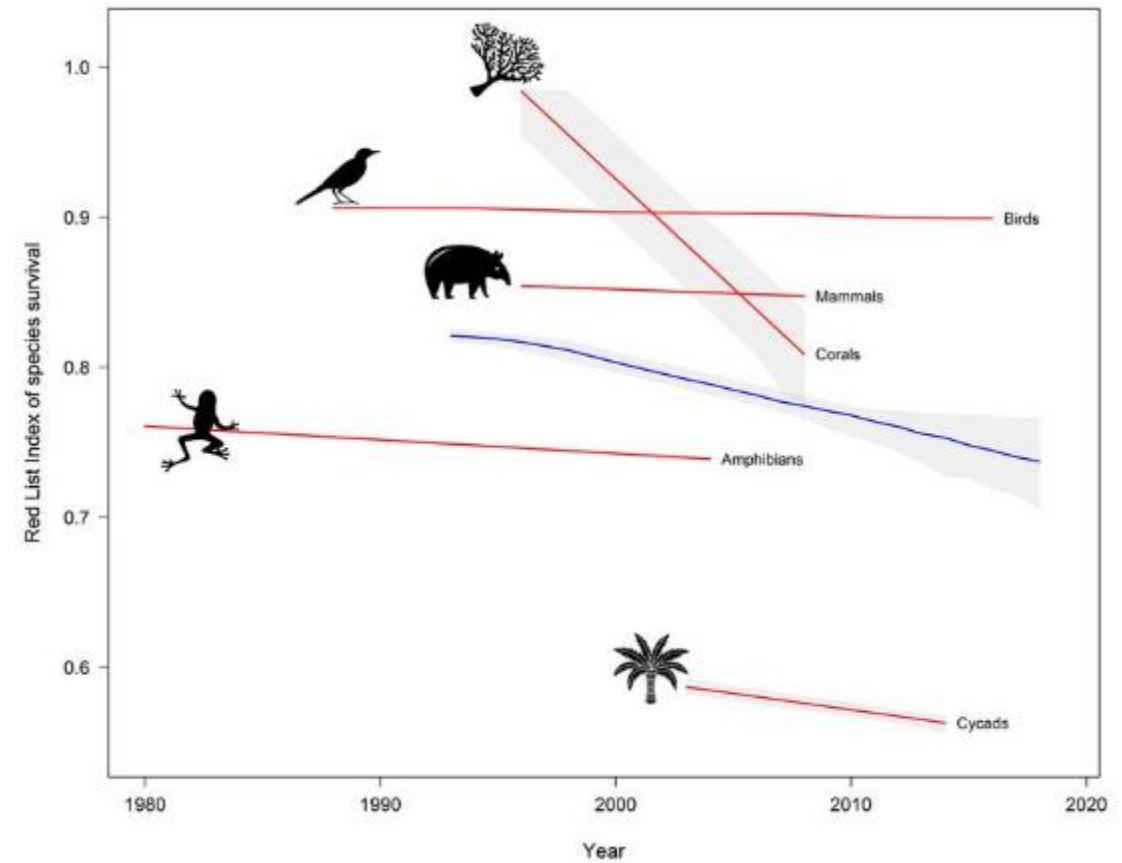
**Conservation of ectomycorrhizal fungal and their habitat:
Challenges for sustainable management of biodiversity in
Benin (West Africa)**

AIGNON L. Hyppolite

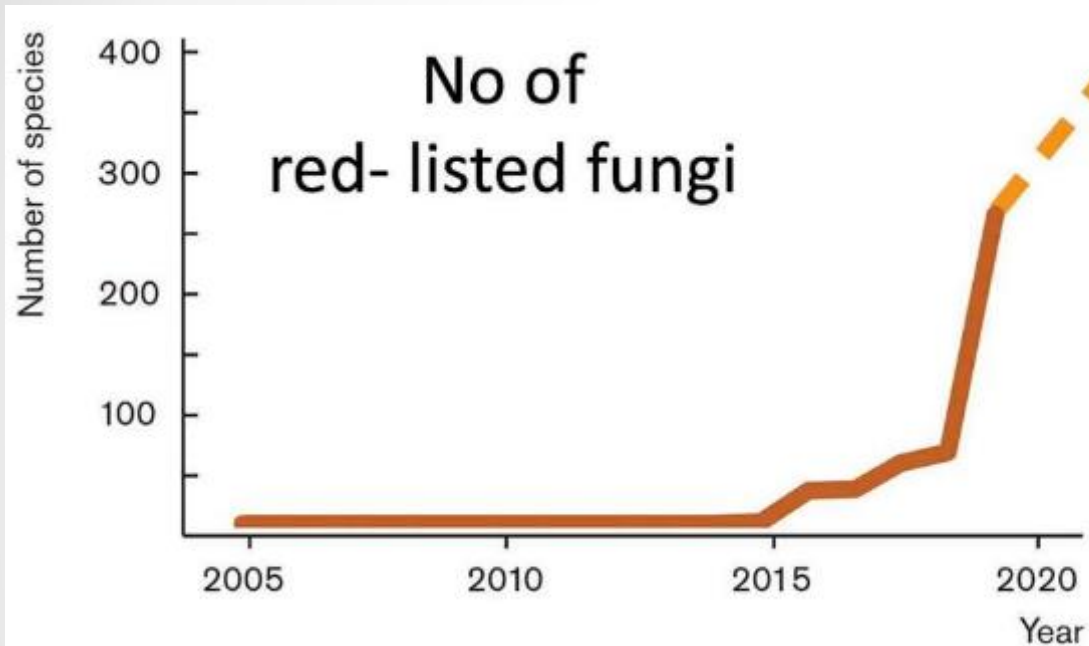


Introduction

- 120,000 species assessed;
- Little fungi assessed;
- Although fungi are one of the most biodiverse groups in the world,

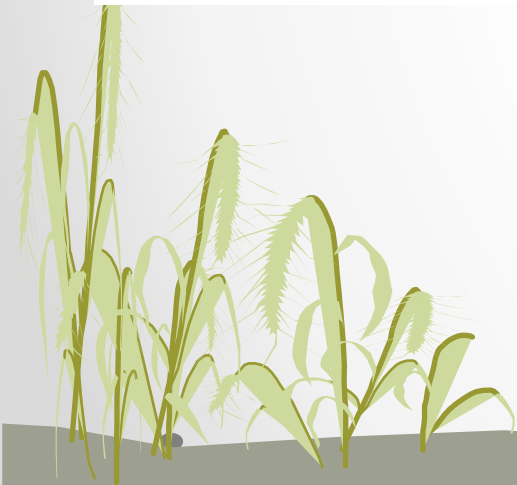


Introduction



- Currently less than 400 fungal taxa are assessed and published.
- The last two years the conservation efforts of mushrooms have become more important globally.

<http://iucn.ekoo.se/iucn/plans/>

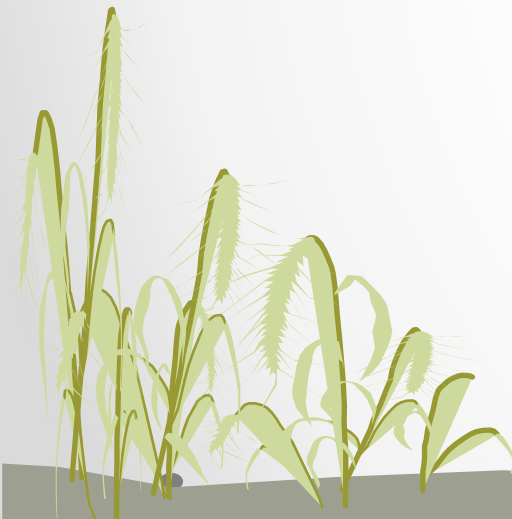


Objectives

- 1) Analyze the distribution and diversity of ectomycorrhizal fungi and their partner trees;
- 2) Enrich the forests area degraded by ectomycorrhizal trees;
- 3) Establish the dialogues with local population to ensure the preservation of fungal habitat for the long-term viability of ectomycorrhizal fungal species and their habitat;
- 4) Propose a sustainable management plan for ectomycorrhizal trees to avoid their destruction during forest management works and
- 5) Establish an educational program for sustainable management and protection of biodiversity in Benin.



Activities



ECM Tree List

Species	Habitat and Distribution in Benin	References
<i>Isoberlinia doka</i> Craib & Stapf	Soudano-Guinean woodland	Ducouso et al. 2003 ; Bâ et al. 2014 Houngnandan et al. (2009)
<i>Isoberlinia tomentosa</i> (Harms) Craib & Stapf	Soudanian woodland	Ducouso et al. 2003 ; Bâ et al. 2014
<i>Berlinia grandiflora</i> (Vahl) Hutch. & Dalziel	Soudanian woodland Gallery forest	Ducouso et al. 2003 ; Bâ et al. 2014
<i>Afzelia africana</i> Sm	Soudanian woodland Tropical dense forest	Ducouso et al. 2003 ; Bâ et al. 2014 KAKPO et al., (2018)
<i>Burkea africana</i> Hook.	Soudanian woodland Tropical dense forest	Yorou et De kesel 2011
<i>Anthonotha crassifolia</i> (Baill.) J. Léonard	Soudanian woodland	Ducouso et al. 2003 ; Bâ et al. 2014, Adjakpa et al. 2011

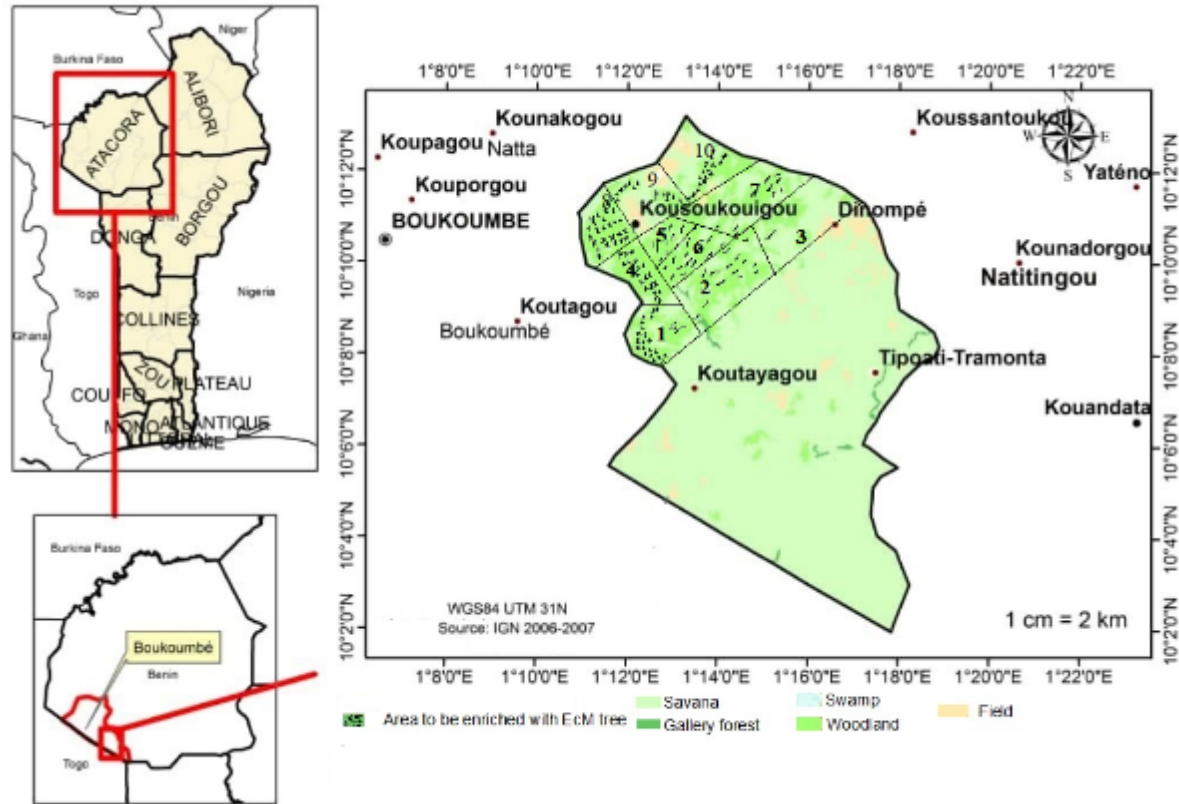


EcM Tree List

<i>Anthonotha fragrans</i> (Baker f.) Exell & Hillc.	Soudanian woodland	Ducouso et al. 2003 ; Bâ et al. 2014
<i>Anthonotha macrophylla</i> P. Beauv.	Soudanian woodland Pobè	Ducouso et al. 2003 ; Bâ et al. 2014
<i>Monotes kerstingii</i> Gilg	Soudanian woodland	Ducouso et al. 2003 ; Bâ et al. 2014
<i>Monotes lutambensis</i> Verdc	Soudanian woodland	Ducouso et al. 2003 ; Bâ et al. 2014
<i>Uapaca togoensis</i> Pax	Soudanian woodland Gallery forest	Ducouso et al. 2003 ; Bâ et al. 2014
<i>Uapaca guineensis</i> Müll. Arg.	Soudanian woodland Gallery forest Tropical dense forest	Ducouso et al. 2003 ; Bâ et al. 2014
<i>Uapaca heudelotii</i> Baill.	Tropical dense forest	Ducouso et al. 2003 ; Bâ et al. 2014

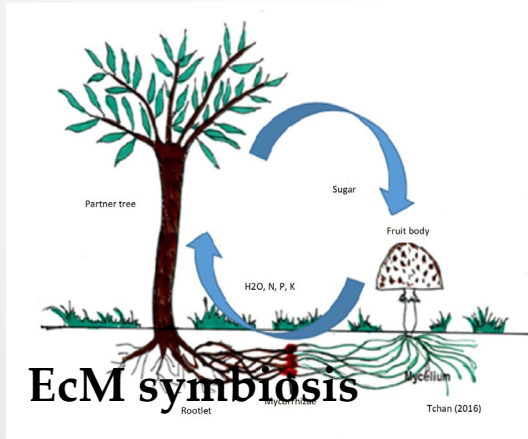


Management plan



Management plan of Koussoucoingou gallery forest

Threats on Partner Trees



<https://www.webonary.org/> <http://www.westafricanplants.senckenberg.de/>

Sensitization



Nursery



EcM tree nursery installation



Isoberlinia doka



Berlinia grandifolia

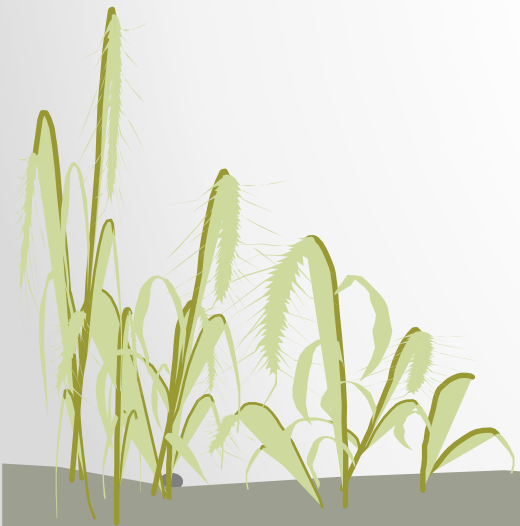
Reforestation



Conclusion

For effective conservation of ectomycorrhizal fungi and their habitats, local populations has to:

- Respect the limits of the classified forests during agricultural activities;
- Avoid excessive logging of partner trees of fungi;
- Promote sustainable forest management.



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