

Doaa Elazab



Consiglio Nazionale delle Ricerche
Istituto per la BioEconomia

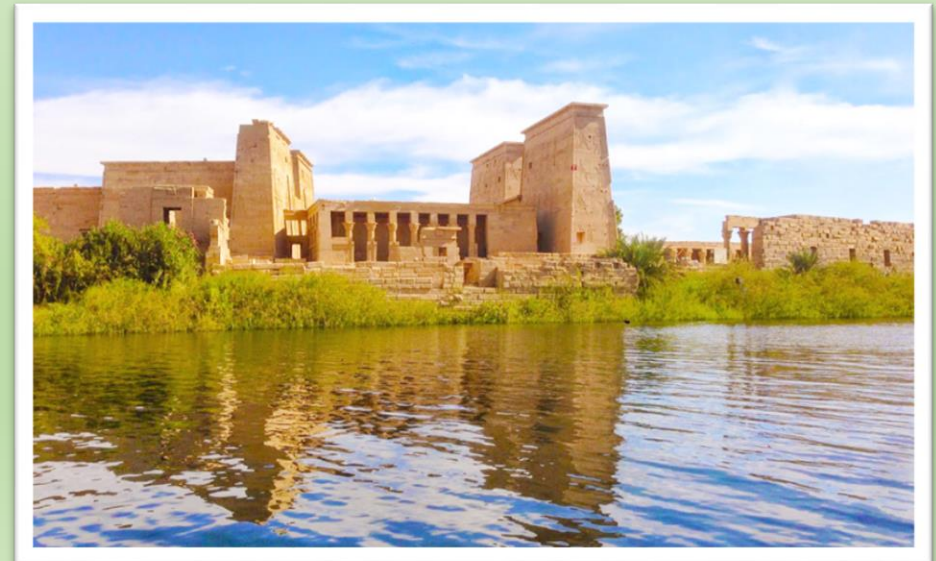
Dipartimento di Scienze Bio Agroalimentari

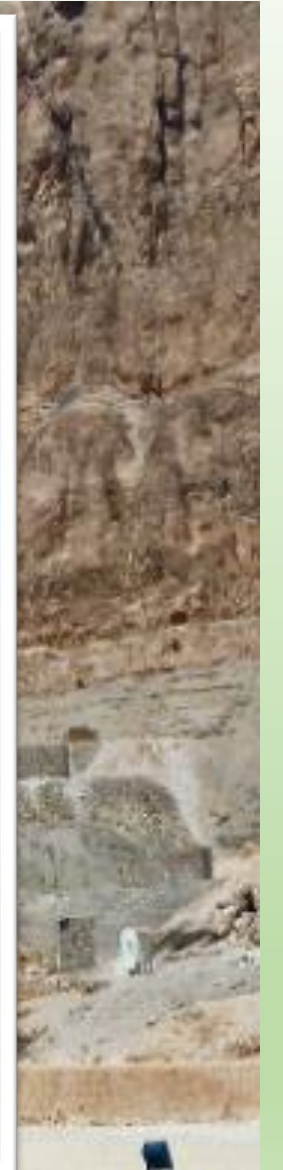


Assiut University



EGYPT







ALHEFNAWY



جامعة اسيوط

كلية العلوم



FERRERO has established 100% traceable plantations in Chile, Argentina and the USA in order to create a year-round supply. Now in Italy and east Europe Ferrero has many projects for producing high-quality nuts in large scale from selected cultivars.

Aims of project:

- **Develop and optimise micropropagation protocols for *Corylus colurna* for the commercial production of clonal rootstocks:**
 - **micropropagation**
 - **organogenesis**
 - **micrografting**
- **Develop strategies for the medium- and long-term conservation of *Corylus* spp. germplasm**

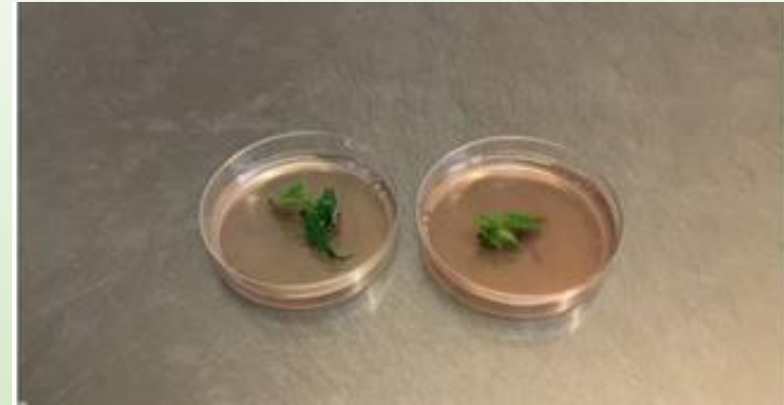
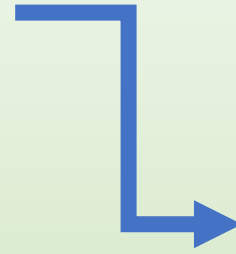
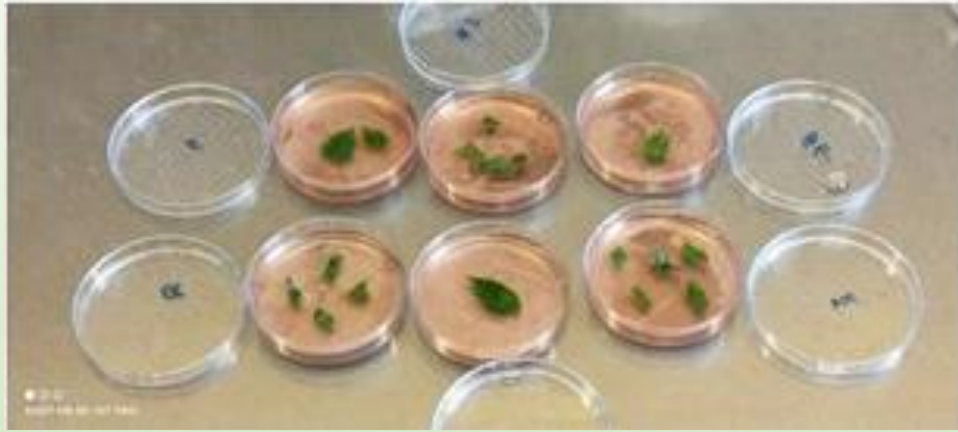
The explants are put horizontally touching the media



Commercial silicon is used to block the endogenous contamination and phenolics compounds.



ORGANOGENESIS



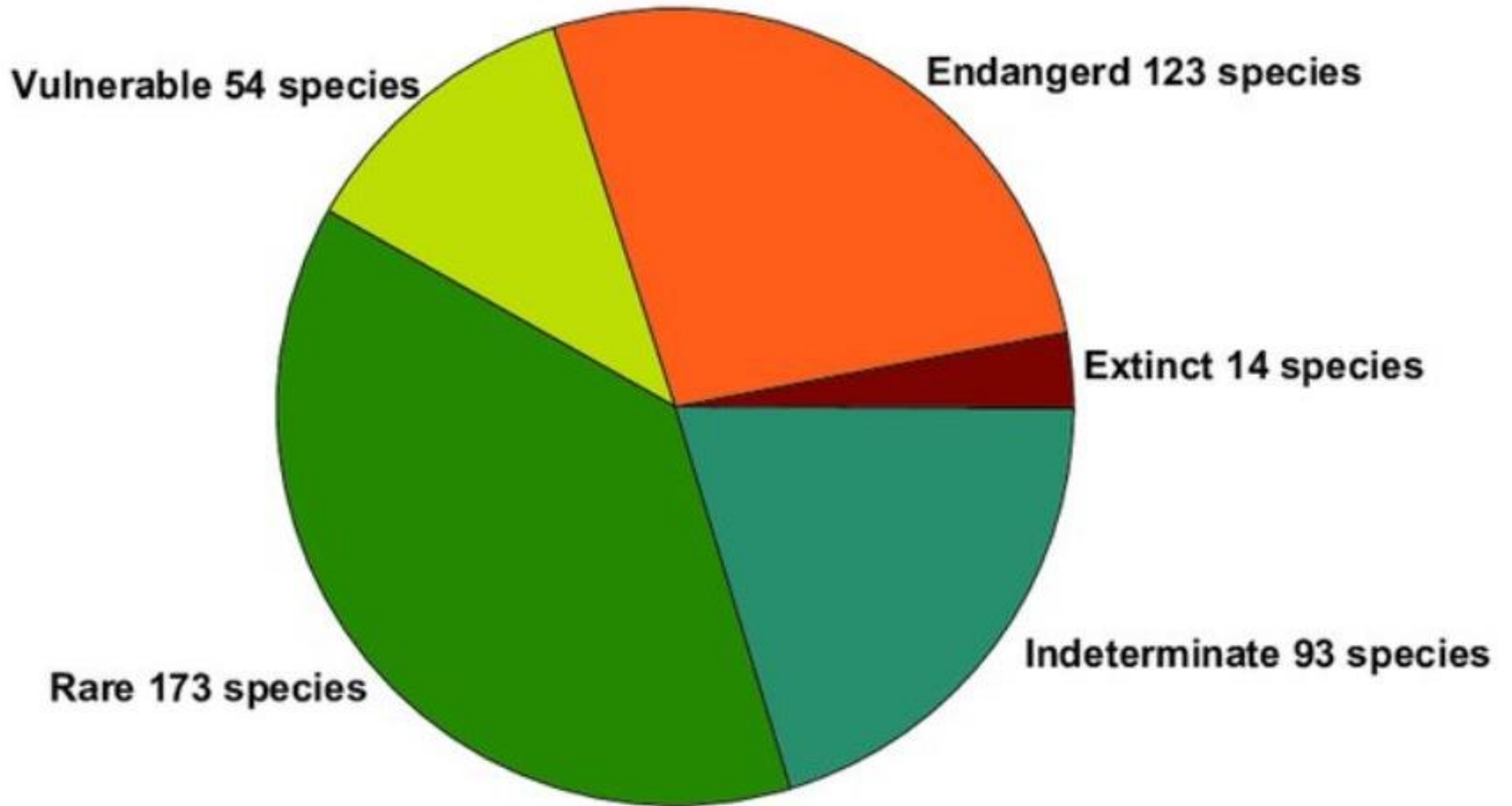


MICROGRAFTING

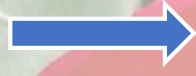


- DKW
- Glucose 50g/l
- Zeatin 10mg/l
- PVP 1g/l
- Silver nitrate 20 mg/l





Cryopreservation



Next step

Development of an effective procedure of cryopreservation of *C. colurna* (“droplet method” and “C- and D- cryoplate”)

Collaboration between CNR-IBE,
Prof. Maurizio Lambardi, and.....

....Catholic University of
Leuven, Prof. Bart Panis



My interest in cryopreservation:

1

Using the cryopreservation techniques for preserve *Corylus* spp. Germplasms.

2

Introducing cryopreservation for the first time in my University in Egypt (Assiut University) to preserve the endangered species like *Zizyphus spina cristi* germplasms.



I'm in the Management Committee representing Egypt in the COST Action CA21157.

- I'm applying for Short Term Scientific Mission (STSM) at Dr. Bart Panis cryopreservation laboratory to examine the applicability of the “droplet vitrification” cryo-procedure to selected shoot lines of *Coryllus* spp. After, the survival and regrowth of explants will be assessed, then the storage in liquid nitrogen. The STSM objective is to achieve a protocol of wide applicability for the *Corylus* germplasm.

THANK YOU

