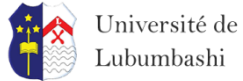


28 February – 1 March 2018



2018 regional  
**COPPER**  
flora  
workshop



Discussion

Towards  
a  
**Regional Network**  
for  
**Copper Flora**

Kolwezi-Fungurume - Democratic Republic of Congo



# TOWARDS A REGIONAL NETWORK ?

- A network of dedicated partners for conserving copper flora
- Added value for individual actions by mining companies
- The network is managed in a clearing house mechanisms

# Clearing House Mechanism

A platform to

- Promote and facilitate technical and scientific cooperation between regional partners for the copper flora conservation ;
- Develop a global mechanism for exchanging and integrating information on copper biodiversity;
- Develop a human and technological network.

## Key elements

**Information exchange, Co-operation, Network Development, Transparency**

# Clearing House Mechanism

## Proposal

- Managed by ULiège and Unilu as independant experts
- Targeted to Mining companies
- Partnership with NGOs – Government

# Actions

- An updated survey of copper flora state

## **Challenges are identified**

- Regional objectives that can be reached by individual contributions of different mining partners

## **Individual actions are integrated**

- Support to mining companies to manage information and report on progress to NGOs and Government

## **A Reporting system is developed**

Share experience and best practices on conservation techniques

## **Web site for sharing information is developed**

## **Training sessions are organized for environmental managers**



## DERNIERES NOUVELLES DU SCDB

- [With immense sadness, we announce the death of our dear colleague Olivier de Munck. He was a supremely dedicated colleague who joined the Secretariat in 1999.](#)
- [Nominations are now invited for the MIDORI Prize for Biodiversity 2018. The call for nominations remains open until 15 June 2018.](#)
- [The February 2018 edition of the Global Partnership for Business and Biodiversity newsletter is now available.](#)



## BIENVENUE SUR LE SITE DU CHM DE LA REPUBLIQUE DEMOCRATIQUE DU CONGO



Le centre d'échange d'informations sur la Diversité Biologique (CHM) est mis en place conformément au paragraphe 3 de l'article 18 de la Convention sur la Diversité Biologique.

Il joue principalement trois rôles à savoir:

- la promotion et la facilitation de la coopération technique et scientifique ;
- la promotion et la facilitation des échanges d'informations entre les parties, les autres gouvernements et parties prenantes ;
- un mécanisme pleinement opérationnel avec la participation de toutes les parties et d'un réseau élargi de partenaires.



Le CHM constitue aussi une vitrine nationale qui met en exergue les richesses dont regorge la République Démocratique du Congo ainsi



## CALENDAR OF EVENTS

« Février 2018 »

Lu	Ma	Me	Je	Ve	Sa	Di
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28				



## DÉCENNIE DES NATIONS UNIES

# Seeds for the project

# Mobiliser les compétences du réseau

Partenaires directs



Université de  
Lubumbashi



Partenaires indirects (scientifiques)

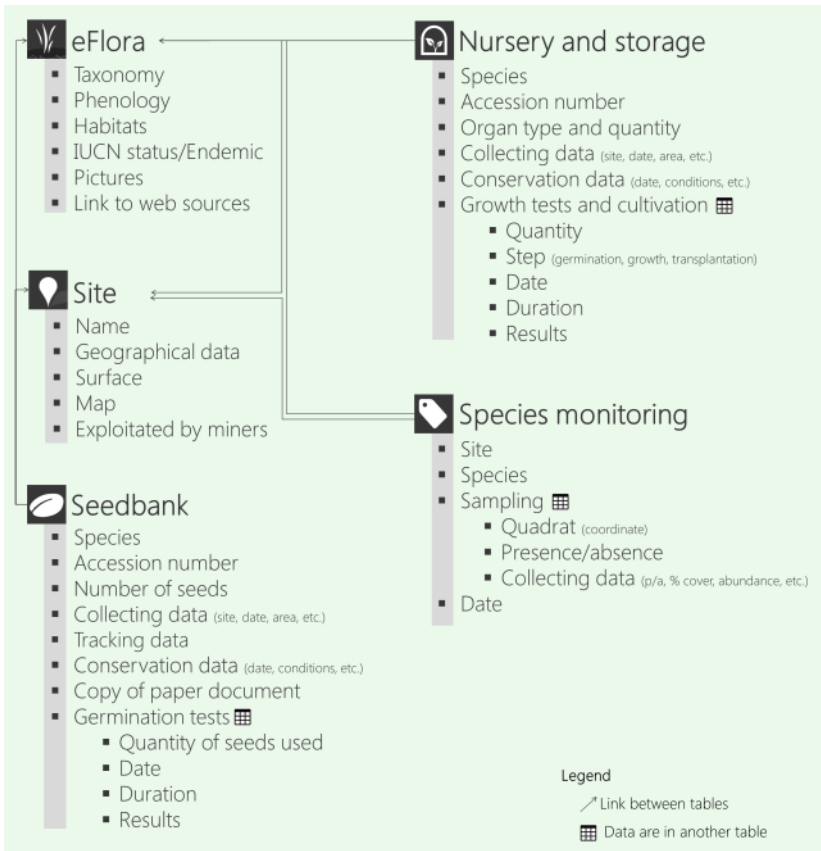


Questions  
Evaluation des actions

Amélioration  
des actions et  
de la stratégie







**EN** *Acalypha cupricola* Robyns ex G.A.Levin **EUPHORBIACEAE**

Interest : Strict endemic

**GENERAL INFORMATIONS**

IdGx : 2  
 Classe : Magnoliopsida  
 Family : Euphorbiaceae  
 Sub-family :

**HABITAT(s)**

Steppe on rocky outcrops  
 Steppic savanna (summit)  
 Steppic savanna (slope)  
 Steppic savanna (dembo)  
 Transition shrub savanna

**PHENOLOGY**

V																			
F																			
Fr																			

**CONSERVATION IN SEEDBANKS**

UNILU : 5 accessions (1485 seeds)  
 BR : 23 accessions (25870 seeds)

Fact sheet generated with CF database, 20/05/2015 15:31. (c) Biodiversity & Landscape Unit. Gx ABT, ULg.

[Print](#)

# Acalypha cupricola Robyns ex G.A.Levin

## EUPHORBIACEAE

**Interest:** Strict endemic

**Proposed IUCN Status:** EN

### DISTRIBUTION

Restricted to Cu-hills, with a wide distribution throughout the Katangan Copper Arc.

### DESCRIPTION

Perennial herb from a thick, woody rootstock. Numerous erected stems, 30-90 cm tall, light green turning reddish brown, pilose and densely pubescent. Caduceus linear stipules, 1-2 x 0.5 mm. Narrowly ovate to obovate leaves 4.0-6.0 x 0.8-1.2 cm, densely puberulent. Plants monoecious or dioecious, with staminate or androgynous, axillary inflorescences (30-60 x 2.5-3 mm) or solitary, pistillate flowers. Capsules 3 x 4 mm, densely puberulent, 3-seeded. Seeds 2.3-2.6 x 1.8-2 mm, smooth.

### ECOLOGY

Occurs on lowly to moderately Cu-enriched steppic savannas, from the contamination dembo to the summit steppic savannas.

### CONSERVATION TECHNIQUES

● **Seed collection and extraction:** Seeds production is limited and collection challenged by the bursting of mature capsules and the rapid dispersal. Usual collection ranges from 2 to 20 seeds per individual, with many being empty. Capsules containing seeds are collected manually, in October-November, rubbed in a 2 mm sieve after what seeds are isolated under the sieve (remaining seeds can be collected on the mesh). Collection could be improved by placing mesh bags around immature capsules.



Habit (c) Séleck M.

### PHENOLOGY

Flowering and fruiting peaks occur at the beginning of the rainy season, after which the plant develops for the rainy season.



Cotyledons © Séleck M.

- **Seed storage and germination rates:** Because of difficulties in seed collection (few seeds per individuals, usually sterile), few seeds have been stored in seed banks. Though still to be confirmed with future tests, germination is null for collected samples.
- **Nursing:** Sowing of seeds collected on site is likely to fail and should be replaced by vegetative reproduction. Feasibility is to be evaluated.
- **Seed weight:** 1000 seeds = 2.6 g.
- **Translocation:** Translocation has proven to be moderately successful for this species: survival rate of individuals translocated to Shimbidi artificial ecosystem is of 46 % after 3 months and will have to be confirmed.
- **Vegetative reproduction:** Tests of vegetative reproduction should be established on root cuttings 10-15 cm long or on ramets treated with rooting hormone.

**References:** Levin G. et al. 2007.



Male flowers © Pamentier I.



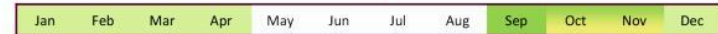
Trilobate capsule © Piquenry J.



Seeds © NBGB - Strack van Schijndel M.



Diffuse rooting system © Willem A.



# Experience for similar project

## Belgian association of non-energy extractive industries

Production of aggregates (limestone, sandstone, porphyry, sand, gravels, marine aggregates), lime, dolomite, ornamental stones

### Key figures 2014 – Fediex members



Extraction: 57.1 millions T



Direct Employment : 2,840



85 sites



# From the biologist point of view ...

## 3. Temporary ponds



## 4. Invasives?



## 5. Rehabilitation



## 2. Screens



## 1. Cliffs



## An innovative partnership: multi-sectorial collaboration

“ Industry – Public Authority – University – NGO ”



# The 3 pillars of the project

## On-site demonstration

### Phase I [2015 - 2018]

Implementing biodiversity management plans  
in 14 quarries in Wallonia

