



**- International Fund for Agricultural Development –  
– Scouting and Sharing Innovation in Western and Central Africa –**

**– Biological control of the cassava mealy bug –**

**I. Background**

**1. Name of innovation**

Biological control of the cassava mealy bug

**2. Country – Region**

Cameroon, Central Africa

**3. Organization**

Roots and Tubers Market-Driven Development Programme (PNDRT)

**4. Who is the innovator?**

PNDRT

**5. Actors involved**

Farmers (15) belonging to the Mbufung cassava growers' farmer field school (FFS)

**6. Implementation date**

September 2006

**7. Type of innovation**

Institutional and knowledge-sharing

**II. Key issues**

**8. Summary**

1. Cropping techniques are combined with the use of small *Trephosia* spp. bushes as an insecticide to prepare the ground: decomposing plants are turned into the soil, including *Trephosia* spp. leaves if possible.
2. Cuttings are treated with a *Trephosia* spp.-based solution (a natural insecticide), while farmers with the necessary financial resources can use a Decis-type commercial insecticide.
3. Two months after germination, organic manure mixed with wood ash (mineral insecticide) is applied.
4. Wood ash applications are repeated (as often as such ash is available).
5. The field is treated with a *Trephosia* spp. solution every three months.

**9. What issues does the innovation address?**

Falls in yields and production

**10. Key success factors for replication**

Ease of use of the technique

**11. Main results**

The technique has led to an increase in yields and production.

In the case of the Bamenda branch, the yield obtained through use of the technique is eight times that obtained on a plot suffering cassava mealy bug attacks (i.e. a plot where the technique was not used).

## 12. Target groups

- Poor people
- Women
- Young people

## 13. Difficulties encountered

- Difficulty in finding organic manure
- The large quantities of *Trephosia* spp. leaves required

## 14. Financial aspects

- High cost of cow dung: CFAF 1,000 per 60-kg sack
- High cost of chicken droppings: CFAF 5,000 per 25-kg sack

## III. Technical summary

### 15.

- *Trephosia* spp. leaves are gathered (filling a 10-litre bucket)
- The leaves are crushed in a mortar with the addition of a little water (0.5 litres)
- A solution of *Trephosia* spp. is obtained
- This solution is strained (about 1 litre)
- 8 litres of water are added (i.e. 2 litres of *Trephosia* spp. solution to 15 litres of water)
- The solution is applied in the field with a sprayer (one per 500 seedlings); if no sprayer is available, a 25-cl glass can be used per seedling

## IV. Follow-up

### 16. Key contacts

Name	Organization	E-mail
Thomas NGUE BISSA	PNDRT/Yaoundé BP 15 308 Yaoundé Tel: 99 91 73 95 94 18 47 09	nguebissafr@yahoo.fr racines&tubercules@yahoo.fr
André MBAIRANODJI	PNDRT/Yaoundé BP 15 308 Yaoundé Tel : 77 09 95 23 99 31 95 23	mbaira@netcourrier.com mbairano@yahoo.com
Rigobert PEYANI TAMBO	PNDRT/Bamenda	rigopeyani@yahoo.fr

### 17. Internet link

- [www.pndrt-cm.org](http://www.pndrt-cm.org)
- <http://www.fidafrique.net/rubrique98.html>

### 18. Key documents

Link: <http://www.fidafrique.net/article1017.html>