

# Agricultures des savanes du Nord-Cameroun

Vers un développement solidaire  
des savanes d'Afrique centrale



Projet Garoua

IRAD ■ CIRAD ■ ORSTOM

Ministère de la recherche scientifique et technique du Cameroun

Ministère français de la coopération

Caisse française de développement

**Actes de l'atelier d'échange**

25-29 novembre 1996

Garoua, Cameroun




Illustration de couverture  
Récolte de sorgho, Cameroun.  
J. Martin

© CIRAD 1997



## An integrated approach to forage seed production in the semi arid region of Cameroon

A. A. AWA

IRAD, station zootechnique, BP 1073, Garoua, Cameroun

The cost of establishment and the availability of seeds are among major limitations in the adoption of forage legumes in the northern region of Cameroon. This establishment cost has been found to be reduced by incorporating forage legumes in a cereal crop (MUNTHALI *et al.*, 1990). One of the objectives of this study was to evaluate the effect of intercropping forage legumes with a cereal on seed yield of the former. Another objective was to evaluate the effect of various management and exploitation systems on seed yield and regeneration. *Stylosanthes hamata* and *Calopogonium mucunoides* were planted on a 2 ha piece of land divided into cutting, grazing and control subplots. Four lactating cows were put to graze each grazing subplot and cutting plots were cut at the end of this exercise. All plots were then allowed to set seed and evaluated at harvest. In another experiment, *S. hamata*, *C. mucunoides* and *Macroptilium latyroides* were intercropped with maize in a randomized block design. Age of maturity, forage DM and seed yields were determined at the end of their cycles. Intercropping had no effect on the age of flowering which was 6, 7 and 12 weeks for *M. latyroides*, *S. hamata*, *C. mucunoides* respectively. Seeding age which was 12, 14 and 16 weeks for the three species respectively was equally not affected by intercropping. Rate of establishment was however slower in intercropped *C. mucunoides* and *S. hamata*. Forage DM yield was similar in pure and intercropped *C. mucunoides* ( $7.21 \pm 0.89$  and  $5.91 \pm 0.84$  tons/ha respectively) and *M. latyroides* ( $5.82 \pm 0.73$  and  $4.31 \pm 0.55$  tons/ha respectively), but significantly higher in pure *S. hamata* plots ( $p < 0.01$ ) with mean DM yields of  $8.54 \pm 0.96$  and  $4.98 \pm 0.50$  tons/ha for the pure and intercropped plots respectively. Seed yield was similar in the two treatments for *S. hamata* ( $490 \pm 18$  and  $380 \pm 23$  kg/ha for the pure and intercropped plots respectively) and *M. latyroides* ( $190 \pm 5$  and  $175 \pm 6$  kg/ha) but significantly higher in pure *C. mucunoides* plots ( $277 \pm 3$  and  $225 \pm 5$  kg/ha) ( $p < 0.001$ ). In the first year of establishment, grazing and cutting reduced seed yield of *S. hamata* ( $p < 0.001$ ) compared with the control. However, the difference was largely compensated for by a 35% increase in milk yield of cows grazing *S. hamata*. Forage DM yields in the second year were similar for all treatments in all the species. These results indicate that forage seed production is feasible and economically profitable in an integrated production system.

### Reference

MUNTHALI J.T.K., MSISKA H.D.C., ZIMBA A.W.C., DZOWELA D.H., 1990. Towards an integrated cereal crop-forage production for improved cattle productivity: The Malawi Experience. In DZOWELA *et al.* (Eds). Utilisation of Research Results on Forage and Agricultural By-product Materials as animal feed Resources in Africa. First Joint Workshop held in Lilongwe, Malawi, 5-9 December 1988, p. 234-248.

---

## Evolution de la consommation alimentaire à Garoua et valorisation des céréales locales

J. DOASSEM

IRAD, BP 415, Garoua, Cameroun

H. DEVAUTOUR

CIRAD-SAR, BP 5035, 34032 Montpellier Cedex 1, France

T. FERRÉ

CIRAD-SAR / IRAD, BP 415, Garoua, Cameroun

Les céréales, sorgho, mil et plus récemment maïs et riz, constituent la base de l'alimentation des populations du Nord-Cameroun. La boule, préparation à base de farine cuite à l'eau, est la principale forme de consommation de toutes ces céréales. Les enquêtes de consommation alimentaire réalisées à Garoua ont mis en évidence un besoin de diversification de la consommation des populations urbaines. Les objectifs de la recherche consiste à appuyer les opérateurs économiques (transformateurs, constructeurs d'équipement) afin de mieux adapter leurs produits aux évolutions de la demande. Les travaux conduits ont permis :

- de caractériser la matière première et d'étudier l'aptitude technologique de 32 variétés de maïs et de 11 variétés de sorgho ;
- de définir les conditions d'émergence et de fonctionnement des entreprises de transformation des céréales ;
- d'appuyer l'entreprise MANUCYCLE, constructeur d'équipements de premières transformations (décortiqueur et broyeur) ;
- d'expérimenter des nouveaux produits à base de maïs, avec des préparatrices et avec l'appui du ministère des affaires sociales et de la condition féminine.