



## Farmers' Perceptions of *Imperata cylindrica* and *Chromolaena odorata* Fallows in Cameroon

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### Introduction

The productivity and sustainability of most agricultural practices in the humid tropics of Africa such as Cameroon depends primarily upon the relative rate of soil 'quality' decline during the cropping phase, soil quality regeneration during the fallow phase, and the time allocated to the latter.

Due to increased population density and demand for arable land, fallow lengths have been shortened and the ability of fallows to restore soil fertility and suppress aggressive weeds such as *Imperata cylindrica* and *Chromolaena odorata* has become less effective. Therefore fallows are re-cropped at a younger age when these species are still dominant.

The aim of this work was to understand how farmers view and value imperata and chromolaena fallows, and to find out preferred ways of controlling imperata and chromolaena in cropped fields.



*Imperata cylindrica*

An imperata fallow being tilled after a fallow period of two years



*Chromolaena odorata*

Chromolaena fallow

### Methology

A survey was conducted during April-July 2005 in the North West, South West and Littoral provinces of Cameroon.

A structured and semi-structured questionnaire with both qualitative and quantitative questions was used to capture farmers' perceptions of the two fallows.

### Results

The common local names allude to imperata as a plant that spears or pierces, and/or typifies unproductive situations. As to local names for chromolaena, the names of unpleasant and aggressive people are used.

Farmers perceived imperata-dominated fallows to indicate:

- Poor soils (34%),
- Soils suitable for the cultivation of groundnut and sweet potato (28%),
- Compacted and difficult to till soils (16%),
- 'Sterile' soils, i.e. very unproductive (13%),
- Fallow is not yet ready to be tilled again (9%).

All farmers perceived chromolaena-dominated fallows to indicate softer and more fertile soils which, however, require very high labor input for land preparation.

Farmers considered slashing, deep tillage, rhizome removal, mineral fertilization, weeding and continuous cultivation to be the most effective imperata control measures.

They recommend that chromolaena control measures should involve stump removal.

### Conclusion

Farmers could satisfactorily control imperata and chromolaena but a perceived high labour requirement is seen as limiting factor.

The results indicated high weed density and declining soil fertility to be due to unsustainable farming practices rather than shortened fallow lengths.

Food availability in Cameroon could be improved by paying more attention to general farming practices.

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