



Theme 1

Status and trends
of global soil
nutrient budget

Soil fertility management for improved climate resilience in Senegal: case of the AVENIR project

Babacar Kane*, Kante Nouwodjro, Wuletawu Abera, Caroline Mwongera, Christine G.K Chege

Alliance of Bioversity International and CIAT/ AVENIR Project in Senegal

INTRODUCTION

Smallholder farmers as well as the organizations that support them, face the double challenge of increasing food production while adapting to climate change. To overcome these constraints, among the recommended solutions is the Integrated Soil Fertility Management (ISFM). Defined as an approach based on knowledge intensity, rather than input intensity, ISFM uses local, traditional, and scientific knowledge and integrates it into technologies promoting sustainable natural resource management systems (AGRIDAPE, 2008).

It is in this context that the Adaptation and Valorization of Entrepreneurship in Irrigated Agriculture (AVENIR) project intervenes through the Climate-Smart Agriculture (CSA) approach in the regions of Sédhiou and Tambacounda in Senegal, to contribute to the improved socio-economic well-being and the resilience of agricultural households.

METHODOLOGY

Approach

AVENIR aims to directly reach about 10,000 women and young people from agricultural households (70% women and 30% young people) through several themes, including Integrated Soil Fertility Management (ISFM). The implementation of this will be done at the level of the demonstration sites chosen in the departments of the two pilot regions through training modules aligning theory and practice.

ISFM's interventions aimed at increasing agricultural production for healthier diets for food and nutrition security, will be done through agroforestry, organic amendment (manure, compost, mulching etc.) and adapted fertilization (Deep Placement of Urea (PPU) and micro dose).

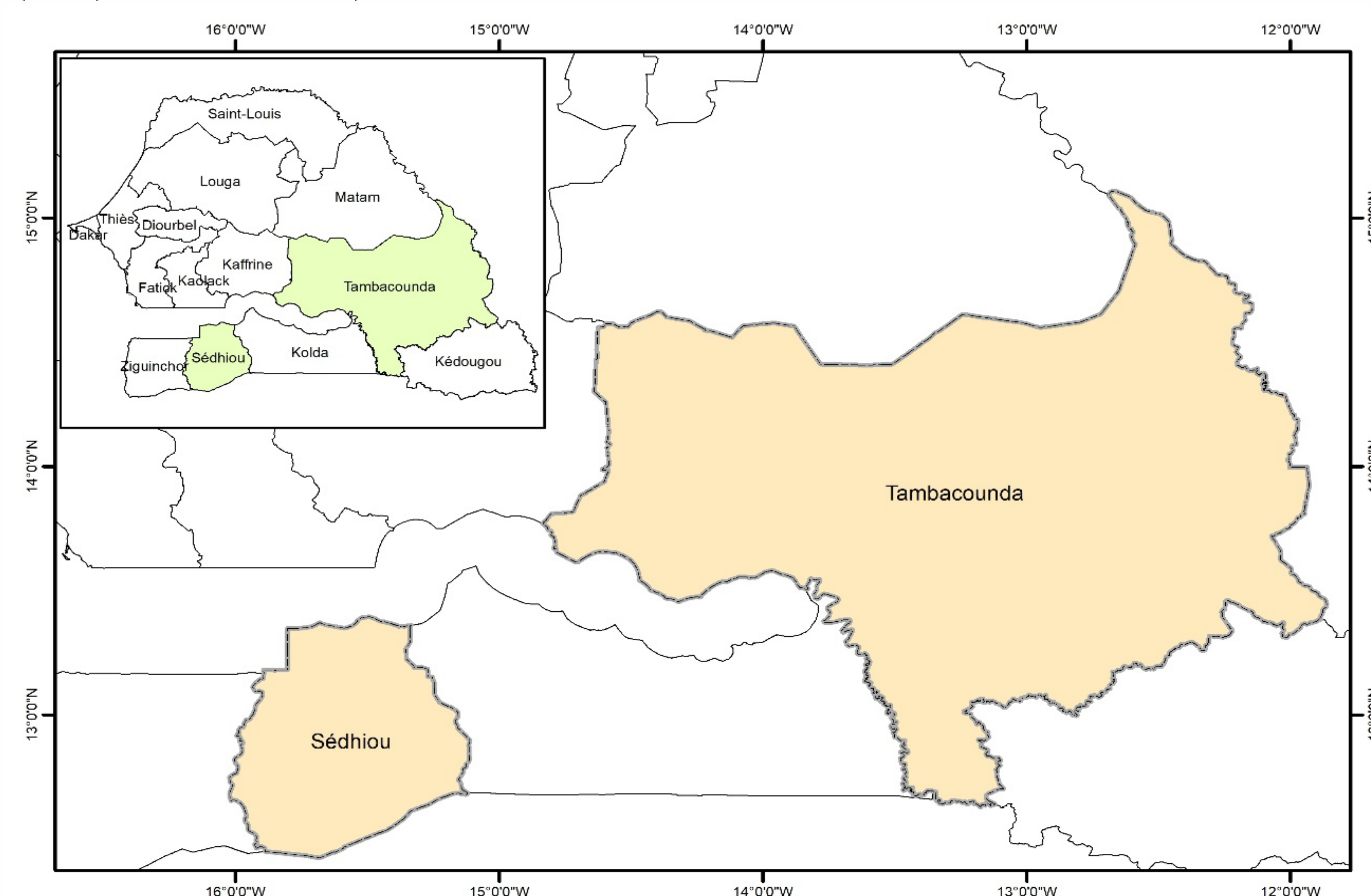


Fig 1: the map of the study areas in Senegal



Progress

We have conducted baseline for project sites for ISFM and other CSA practices. Based on the baseline results, the interventions are designed and will be implemented through: 1) awareness creation of the local community on the use, methods of preparation of various ISFM technologies that are suitable for the project areas; 2) establish demo and teach the beneficiaries through learning by doing at the dm sites.

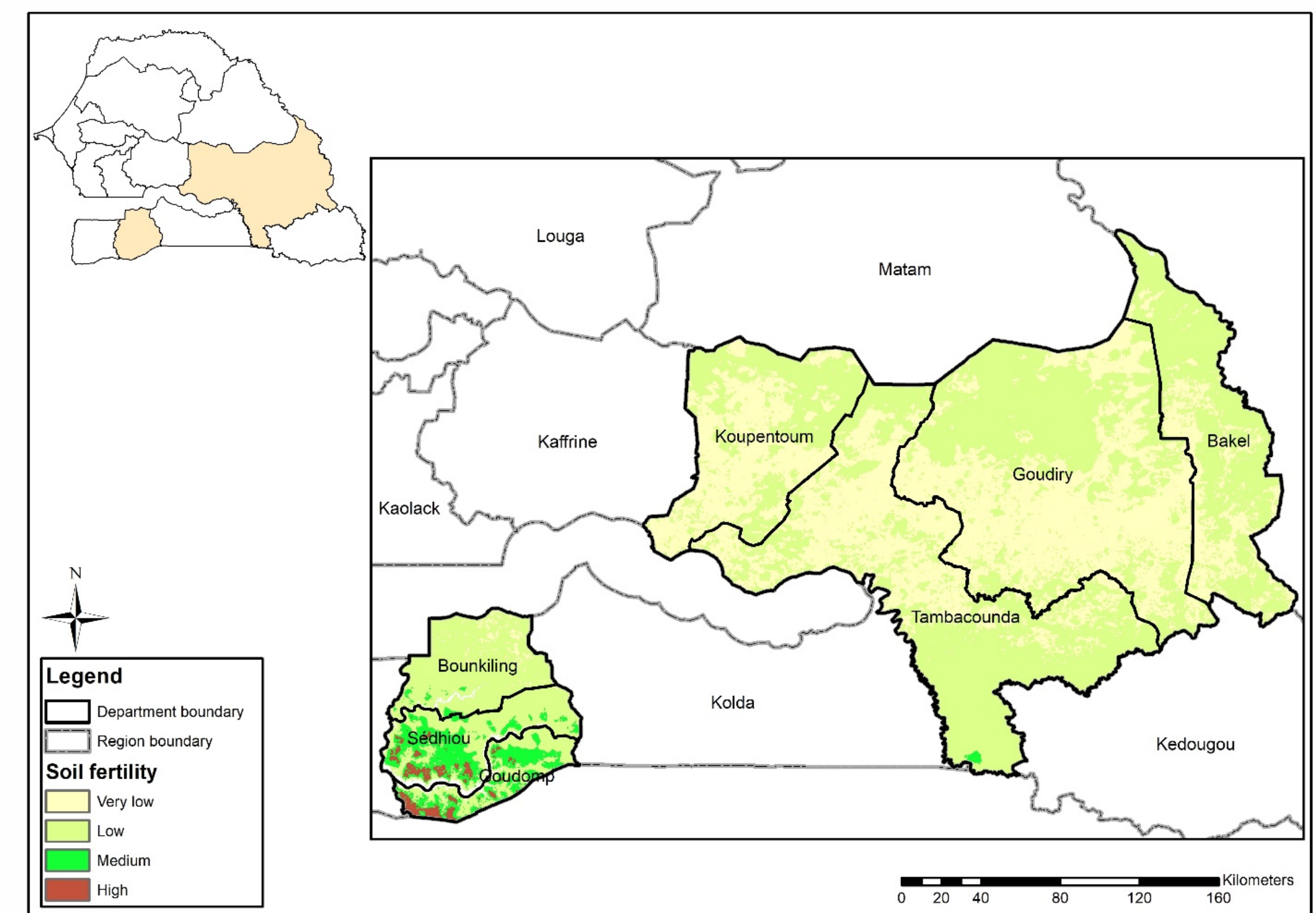


Fig.2: soil fertility map of Sédhiou and Tambacounda region of Senegal (ISRIC)



Fig.3 : Theoretical training with women and youth on integrated soil fertility management



Fig.4: establishing about 16 demo across the project areas to facilitate learning by doing

CONCLUSIONS

Overall, the Integrated Soil Fertility Management Interventions in this project will lead to the adoption of an environmentally friendly technical route, contributing to the food security of rural populations by increasing crop yields and production levels.

REFERENCES

AGRIDAPE, 2008. Living Soils for More Sustainable Agriculture, August 2008-volume 24 number 2, 35p.

