

THE IMPORTANCE OF THE MACROTERMES GENUS (ISOPTERA: MACROTERMITINAE) FOR TROPICAL AGRICULTURE OF SEMI-ARID REGION : THE POINT OF VIEW OF NORTH-CAMEROON'S FARMERS

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Contradictory results deal with the importance of the mound build by *Macrotermes* for tropical agriculture. Agronomic studies present this genus as a major tropical pest for maize, yams and sugar cane crops. On the contrary, pedological and ecological studies emphasize on their significant role on the regulation of ecosystem processes and on the establishment of soil fertility status. This work aims at studying the farmer's point of view and the agricultural practices concerning the nest of *Macrotermes*. In the Fali region of the North-Cameroon, farmers cultivate systematically the peripheral zone of the mound with maize or sorghum crops associated with okra (*Hibiscus esculentus*) and cucurbitaceae, even if the mound is located on groundnuts, rice or cotton field. The production of cereal obtained around each mound reaches 18.5 kg grain maize or 51.6 kg grain sorghum on a 46.8 m² peripheral fertile zone (n= 197 mounds). Although this zone concern 3.5 % of all the cultivated area, its yield represents 18-20 % of the total cereal production (n= 28 farmers). Farmers protect these mounds and prefer to cultivate around it rather than use as a soil amendment or destroy and level it. The fertility of these mounds is therefore used to reduce agricultural risk and provide a stock of cereal with a minimum time consuming labor. These results clearly emphasizes on the need to investigate traditional knowledge and practices in order to improve the management of soil fauna in tropical farming system.