

Farmers' appreciation of fodder trees and their preference by sheep in the Sudano-Sahelian zone of Burkina Faso

Linda C. Gabriella Traore¹, Minata Ouattara¹, Sita Sanou¹, H. Oumou Sanon¹, Regina Roessler³, Valérie Bougouma-Yameogo⁴, Eva Schlecht²

I: Institute of Environment and Agricultural Research (INERA), Department of Animal Production, Burkina Faso / 2: University of Kassel and University of Goettingen, Animal Husbandry in the Tropics and Subtropics, Germany / 3: University of Kassel, Animal Husbandry in the Tropics and Subtropics, Germany / 4: Nazi Bony University, Institut of rural development (IDR), Burkina Faso

Introduction

Trees provide important functions to the rural population in the Sudano-Sahelian zone of Burkina Faso. During the dry season, they constitute an essential resource for feeding ruminant livestock.

The objective of our study was to identify the fodder trees that are, according to farmers, the most palatable for small ruminants, and to confirm farmers' perception through a palatability test.



Fig. | Map of study area

Methods

- 185 livestock-keeping households in the central-west region (Fig. 1) were interviewed using a semistructured questionnaires on the different uses of threes and shrubs
- 8 most cited trees were selected and separated into two group for an on-station feeding experiment (Tab.I)
- On-station feeding choice experiment by observing sheep's preferences for fresh and air-dried leaves (30 minutes)



Conclusion

- Farmers have a fairly good knowledge of the woody plants that are palatable to sheep.
- Ficus sycomorus, Ziziphus mauritiana and Bombax costatum should be promoted for small ruminant feeding.



Fig. 2 Fodder trees most palatable according to farmers

- According to farmers, 15 trees and shrubs consumed by sheep
- Most palatable are Ficus sycomorus, Lannea microcarpa, and Pterocarpus erinaceus (Fig. 2)



Tab. I Leaves used in experiments

Group I	Group 2
Ficus sycomorus (Fi)	Ziziphus mauritania (Zi)
Pterocarpus erinaceus (Pt)	Bombax costatum (Bo)
Lannea microcarpa (La)	Guiera senegalensis (Gu)
Khaya senegalensis (Kh)	Azadirachta indica (Az)



Reference:

map of study area conceived by Sanan, H. 2022





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Fi Kh La Pt Az Bo Gu Zi Species Species

Fig. 3 Consumption time for dry leaves

- Consumption time was highest for Ficus sycomorus (Group 1), and for Bombax costatum and Ziziphus mauritiana (Group 2) (Fig.3)
- Low preference for Guiera senegalensis, and Azadirachta indica regardless of the condition of leaves (Group 2) (Fig. 3) and low consumption for Khaya senegalensis and Lannea macrocarpa (Group 1) (Fig.3)