Range Mgmt. & Agroforestry 43 (1) : 88-93, 2022 ISSN 0971-2070



## Productivity and quality of fodder as influenced by different bajra napier hybrid and legume fodder cropping systems

K. N. Manoj<sup>1\*</sup>, B. G. Shekara<sup>2</sup> R. K. Agrawal<sup>3</sup> Mudalagiriyappa<sup>4</sup> and N. M. Chikkarugi<sup>2</sup>

<sup>1</sup>University of Agricultural Sciences, GKVK, Bangalore-560065, India <sup>2</sup>AICRP on Forage Crops, Zonal Agricultural Research Station, Mandya-571405, India <sup>3</sup>AICRP on Forage Crops and Utilization, ICAR-IGFRI, Jhansi-284003, India <sup>4</sup>AICRP on Dryland Agriculture, GKVK, Bangalore-560065, India \*Corresponding author e-mail: manojrajagri@gmail.com Received: 7<sup>th</sup> April, 2021 Accepted: 14<sup>th</sup> March, 2022

## Abstract

The adoption of perennial cereal-legume cropping systems will play an important role in achieving higher fodder productivity and provides a way to bridge the gap between supply and demand of fodder in the country. In this context, a field experiment was conducted to identify the suitable BN hybrid + legume intercropping systems in randomized complete block design with three replications. The results revealed that BN hybrid + lucerne (2:8) system recorded significantly higher green fodder (161.4 t/ha/year) and dry matter (31.7 t/ha/year) yields and also yield of fodder quality attributes. However, crude protein (22.20%), ash (11.12%) and ether extractable fat (3.75%) were higher with sesbania grown as a sole crop. The higher non-fibre carbohydrates (34.20%) and total carbohydrates (76.86%) were noticed with sole cropped BN hybrid. The BN hybrid intercropped with legumes performed better interms of quality forage yield and proved as viable systems than sole cropping systems.

Keywords: BN hybrid, Carbohydrates, Crude protein, Fodder yield, Legume fodder