

Short Communication

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Productivity and economical viability of grass-based cropping systems

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Abstract

A field experiment was conducted at Research Farm, Department of Agronomy, Jawaharlal Nehru Krishi Vishwa Vidyalaya, Jabalpur during 2018-2019 to 2019-2020 with eight grass-based cropping systems to assess the fodder productivity and their economic viability. The highest green and dry fodder yields of 160.8 and 40.2 t ha⁻¹ were recorded with sole pearl millet napier hybrid. Maximum pearl millet napier hybrid green fodder equivalent yield of 164.7 t ha⁻¹, system productivity of 451.2 kg ha⁻¹ day⁻¹, gross return of Rs. 247000 ha⁻¹, net return of Rs. 163245 ha⁻¹, monetary return use efficiency Rs 447.2 ha⁻¹ day⁻¹ and B: C ratio of 3.0 were recorded with paired planting of pearl millet napier hybrid + *Desmanthus* when compared to other grass based combinations or systems.

Keywords: Dry fodder yield, Economic viability, Green fodder yield, System productivity