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Short Communication

Potentiality Of Cowpea Cultivars For Fodder Under Agro Climatic Zone Of Kymore Plateau

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In kharif season, legume fodder crops are not widely cultivated in Central Zone of country. However, some of the cereal fodder crops viz; maize, sorghum, Dinanath grass and Bajra are being grown under very limited areas. Cereal forages are rich in carbohydrate while milch animals require protein rich feed, hence ,it is atmost important to supplement balanced feed to the cattle by growing some of the legume in cropping system either sole or as an intercrop. Therefore, it is a need to identify the suitable cultivar, perform well in vertisols of Jabalpur under rainfed conditions. In this context, a field experiment was carried out during kharif 1997 and 1998 at experimental farm, JNKVV,Jabalpur (MP). The soil of the experiment field was clay loam and low in available nitrogen and phosphorus while medium in potassium with pH 7.2. A total of eight cultivars were tested in a randomized block design replicated thrice. The cultivars were sown in rows 30 cm apart on July 3rd and 7th during 1997 and 1998, respectively. An uniform dose of nitrogen phosphorus and potash @ 20:60:20 kg/ha was applied as basal in the form of urea, single super phosphate and murate of potash . The data pertaining to phinological traits, fodder yields, and quality were recorded at harvest of the crop.

The data presented in table 1 revealed significant differences among the cultivars. The genotype UPC- 9202 produced significantly the highest green fodder (207.7q/ha.)as well as dry matter yields (89.7 q/ha.) over rest of the cultivars including check, except UPC-287. The higher yield recorded by the top ranking cultivar due to its genetic potential to produce taller plants and having more number of leaf per plant, as the green fodder and dry matter yields are the function of plant height and foliage (leafiness). (Mishra and Bhatt, 1995). As regards the quality constituents, cultivars UPC 9202 closely followed by UPC-287 produced the high quality fodder interims of leaf stem ratio (0.83 and 0.85) and cruide protein yield (10.35 and 9.12 q/ha), respectively. Thus, form the above findings it could be concluded that the entry UPC-9202 is more suitable for the quality fodder production under agro climatic zones of Kymore plateau.

Table 1: Performance of different cowpea cultivars

Cultivars	Plant Height (cm)	No. of leaf/ plant	Green fodder yield (q/ha)	Dry Matter yield (q/ha)	Protin Yield (q/ha)	Leaf/Sem ratio
IFC-209	54.0	6.6	121.2	56.3	5.57	0.81
UPC-9102	23.4	6.3	46.9	21.4	2.21	0.76
UPC-9103	58.2	10.8	182.9	79.4	6.82	0.69
UPC-9202	99.3	14.4	205.7	89.7	10.35	0.83
CL-321	88.0	9.3	149.7	63.9	6.39	0.68
UPC-287	94.6	12.5	197.7	82.2	9.12	O.85
Bundel Lobia	43.3	6.8	80.0	33.8	3.85	0.79
UPC-5286(c)	38.4	7.4	77.7	31.2	3.69	0.79
SEm +_	2.0	0.52	23.1	9.9	1.68	0.04
CD(5%)	6.2	1.60	70.1	30.1	4.75	0.12

REFERENCE

Mishra L.P. and Bhatt, R.K. 1995. Physiological approaches for forage crop improvement in forage production and utilization Ed.R.P.Singh, Indian grass land & fodder research institute Jhansi (U.P.) pp233-248.

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