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Optimum Time of Cutting for Obtaining Maximum Yield of Extractable Protein from Fenugreek *(Trigonella foenumgraceum)* varieties.

Fenugreek, a leguminous plant, contains appreciable amounts of extractable protein and the yield depends on the variety as well as the age of the crop. An attempt has been made in the present study to screen varieties to fix up the optimum time of cutting for maximum extractable protein yields.

With fifteen cultures of fenugreek and three different ages of cutting *viz.*, 15, 25 and 40 days, a randomised field experiment replicated 3 times was laid out. Leaf protein was extracted by simple method of extraction described by Pirie (1955), Samuel and Kamalam (1964) and Balasundaram and Samuel (1971) and the dry matter and extractable protein yields were recorded. The mean dry matter and extractable protein yields are presented in Table 1.

TABLE 1. Dry Matter and Extractable Protein in Fenugreek Cultures

Fenugreek (Cultures)	15 days		25 days		40 days (Flowering stage)	
	Dry matter Yield kg/ha	Yield of extractable protein kg/ha	Dry matter Yield kg/ha	Yield of extractable protein kg/ha	Dry matter Yield kg/ha	Yield of extractable protein kg/ha
CS 960	90.0	7.5	366.0	14.4	623.0	38.1
CS 382	77.8	6.6	319.5	16.3	480.4	26.3
CS 389	41.0	3.1	179.0	14.4	140.0	10.6
CS 381	76.8	6.4	218.3	19.4	381.5	33.8
CS 464	67.0	6.1	170.0	13.8	306.0	20.6
CS 947	66.0	7.1	200.0	15.6	570.0	38.1
CS 383	98.2	8.8	98.2	11.3	294.6	28.8
CS 385	80.5	6.8	80.5	16.9	410.0	31.9
CS 392	52.0	3.8	134.0	11.9	120.0	7.5
CS 425	24.0	2.8	191.0	15.0	307.0	33.8
CS 388	37.0	2.5	132.0	13.8	165.0	11.9
CS 386	39.0	2.5	200.0	20.0	326.0	22.5
CS 418	76.0	4.8	142.0	16.9	269.9	25.6
CS 917	52.0	3.8	156.0	16.3	244.0	21.3
CS 390	46.0	3.2	186.0	15.0	195.0	13.1

Dry matter :

Cuttings : S. E. 20.74
C. D. 60.06

Cultures : S. E. 46.37
C. D. 134.27

Extractable Protein :

Cuttings : S. E. 1.45
C. D. 3.77

Analysis of dry matter yields showed that cutting and the varieties were significant. Among the ages considered for cutting, 40 days was superior to 25 days followed by 15 days.

In the extractable protein yields, only the age of cutting was found to be significant while the varieties did not attain the level of significance. Among the age of cutting considered a similar trend as in the dry matter yield was found with 40 days being superior was noted.

The study clearly indicated that there is no difference among the cultures in the matter of dry matter and extractable protein production. To secure maximum dry matter as well as the extractable protein yields, cutting at the age of 40 days is preferable.

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