EFFECT OF DIFFERENT DATES OF PLANTING ON YIELD OF PIGEONPEA

R.N.P. Singh
G.T.C. Pasighai- 791102, Arunachal Pradesh.

Pigeon pea (Cajanas cajan (L) Millp.) is an important pulse crop of India. In the north eastern region, this crop is usually grown under rainfed condition in kharif season without appropriate sowing time, fertilizer, weed management and plant protection measures. The sowing time is the one of the main reason of low productivity of the region. The present study was undertaken to assess the suitable time of sowing for increasing yield of pigeon pea.

I field experiment was conducted during Kharif season of 1999,2000 and 2001 at research plot of G.T.C. Pasighat, which is situated at 150 metres altitude (94041'-99039' E; 28043'-29020' N). The soil of the experimental plot was acidic PH4.0, loamy sand in texture, high in organic 1.62% medium in phosphorus and potash (3.5 and 152.3 kg 1ha) respectively. The experiment was laid out with variety ICPL-151 and ICPL-88039 in randomized block design with each 3 treatments and replication. The treatment consisted 3 date of sowing viz. 20th June, 20th July and 20th August. A basal dose of 15 kg N, 40 kg P and 0 kg K were applied according to the recommendation of AAU, Jorhat (1992). The seeds were sown under rainfed condition in the field with spacing 60x20 cm (directed by Dr. K.B. Saxena, Senior Scientist pigeon pea, ICRISAT, Hyderabad). Necessary intercultural and application of pesticide were done as and when required. Harvesting was done when three-fourths of the pods turned darkish in colour. The harvested pods were kept in sun for drying and then threshed.

Results (Table 1) revealed that the pigeon pea variety 'ICPL-88039 gave significantly higher yield than ICPL-151. This might be due to vigorous vegetative growth, superior yield attributes and higher yield potentiality of 'ICPL-88039' over 'ICPL-151' under pasighat condition. Among the different dates of planting, maximum yield was obtained when crop was planted on 20th July, which was significantly higher than all other dates of planting. This may be attributed to the fact that the crop planted on 20th July received favourable climatic condition for growth and development of plant. On the other hand, crop planted in the month of June, lower the grain yield. Lower yield might also be due to weed infestation per unit area were more in earlier sowing. The findings also revealed that the yield loss increased with delay in planting. Sinha et al (1989) were also observed the less yield, when the crop were sown on 10th August. Late sowing in the month of August also significantly decreased the grain yield. This might be due to climatic effect and low moisture present in the soil. Both the varieties showed their superiority under 20th July planting.

REFERENCES

AAU, Jorhat, 1992. Package of practices for kharif crops of Assam : 47
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Table 1. Grain yield of pigeon pea (q/ha.) as influenced by time of sowing.

Treatment	Mean Grain yield	
Time of sowing	Variety ICPL-151	Variety ICPL-88039
20th June	17.59	20.00
20th July	19.75	21.68
20th August	13.25	14.69