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Sunhemp Seed Production in Andhra Pradesh

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Sunhemp (*Crotalaria juncea L.)* is leguminous crop known for fodder, green manure, fiber, fuel. The crop is majorily used in farmers fields to improve the soil health due to its nitrogen fixing ability. Sunhemp is now-a-days gaining importance in farming community for seed purpose. Sunhemp is grown in tropical and subtropical countries like India, Brazil, Bangladesh, Nepal, Srilanka, Sothern Africa (Chaudahry *et al*.2016). There is deficit in availability of seed. Hence farmers can produce their seed for further use. Farmers of Andhra Pradesh interested in seed production of sunhemp, as it acceptable and fetches good remunerative price in market. Climatic factors like temperate regions hinder seed production. (Mosjidis and Wehtje 2011). Sunhemp is photo sensitive crop. It is advised to adopt sunhemp seed production in early rabi which have bright sunshine hours. More number of cloudy days during sunhemp seed production extends the duration of sunhemp.

Uses of Sunhemp

- Sunhemp used as green manuring crop.
- Sunhemp used to improve the organic matter in soil.
- It is used as forage crop.
- It is used as fibre crop.
- It helps in nitrogen fixing.
- It helps in carbon sequestration.
- Sunhemp used as raw material in paper industry.
- It is used as biofuel. (Bhandari *et al*., 2022)
- Sunhemp used for mulching

Soils: Loamy soils or light -medium soils are most suitable. Well drained soils are more suitable. Soils with water stagnation are not suitable.

Seed rate: Seed rate @ 25 kg/ha is recommended. Farmers generally adopt broad casting but line sowing of 30 x 15 cm is also recommended.

Sowing time : The optimum sowing time of sunhemp is during first forthnight of August to Septemeber second forthnight. Further delay causes reduction in sunhemp seed yield. (Bhandari *et al*., 2022)

Varieties: Sunhemp varieties SH-4 (Sailesh) and JRJ 610 (Prankur) may be adopted for cultivation in Andhra Pradesh. Bhandari *et al*., 2022

Fertilizers: Sunhemp is a leguminous crop. To achieve good yields 20:40:40 of N:P: K fertilizers recommended. Foliar sprays of micronutrients at the flowering stage enhances seed yield (Mandal et al. 2017).

Irrigation: Irrigation plays a major role in sunhemp seed yield. Two - Three critical irrigations are required. One at the time of sowing, second at flowering stage and third at pod development stage. Irrigation at preharvest stage is not recommended.

Harvesting & Threshing: Harvesting may be done, when the plant becomes straw coloured and dries. The right stage of harvesting is when the seeds in the pods make sounds. At this stage the crop is harvested and heaped. The crop is threshed and the resulted seed is cleaned after winnowing. The sunhemp seed is dried until the moisture percentage reaches 9- 10 % for seed purpose. The seed should be tested for germination.

Conclusion

Sunhemp is a good green manuring and fibre yielding crop which is gaining importance in seed production among farmers. The seed yield ranges from 12-13 qtls/ha. Sunhemp is a photosensitive crop grown in Rabi season especially for seed production. Farmers may adopt sunhemp seed production and use their own seed further for green manuring and improve their soil fertility.

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