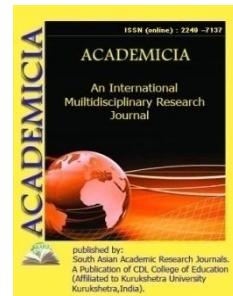


# ACADEMICIA

## An International Multidisciplinary Research Journal

**(Double Blind Refereed & Peer Reviewed Journal)**



**DOI: 10.5958/2249-7137.2021.02407.1**

## INFLUENCE OF SOWING TERMS AND NORMS ON CROTALARIA JUNCAE GRAIN YIELD

**Nurillaeva Manzura Shavkatovna\*; Yakubov Gayrat Kuvondikovich\*\*;  
Negmatova Surayyo Teshaevna\*\*\*; Khalilova Nargiza Jalilovna\*\*\*\***

\*Independent Researcher,

\*\*candidate of Agricultural Sciences Urgench State University (UrSU),  
UZBEKISTAN

\*\*\*DSc, Senior Researcher,

Research Institute of cotton selection,  
seed production and cultivation technologies,  
UZBEKISTAN

\*\*\*\*DSc, Junior Researcher,

Tashkent Agro-chemistry and Soil Science Research Institute),  
UZBEKISTAN

---

### **ABSTRACT**

*The article describes the impact of non-traditional legumes *Crotalaria juncea* on the optimal sowing time and norms of the number of legumes, the number of grains in legumes, 1000 grain weight and grain yield. It is scientifically substantiated that it is possible to get an additional yield if *Crotalaria juncea* was sown 10 kg per hectare in early May (1-5.05), the number of legumes would be 15, the number of grains in legumes would be 4.1, the weight of 1000 grains would be 4.9 g compared to the variant sown 20 days earlier and higher to 9 pieces, 2.8 g in proportion to the variant sown 10 days early and as well as it is possible to get the yield at the rate of 5,2-3,8 c/ha when sowing 14 kg of seeds per hectare for a period of 1-5.05 compared to the early sown variants during the same period; 1.9 c/ha compared to the variant planted at 10 kg per hectare; 3.3 c/ha compared to the variant planted at 18 kg for a quality seed crop.*

**KEYWORDS:** *Crotalaria Juncea L., Meadow Alluvial Soil, Planting Time, Norm, Legume, Number Of Grains, 1000 Grain Weight, Yield.*

**REFERENCES**

1. Aberkulov M., Nazarov H., Isomiddinov N. Krotalyariya osimligining osish dinamikasini organish. "Kadrlar tayyorlash tizimida – agrar ta'lim, fan va ishlab chiqarish integratsiyasi" – International scientific-practical conference dedicated to the 75<sup>th</sup> anniversary of the academician A.I. Imomaliyev. - Tashkent, 2006, 177-179 p.
2. Aberkulov M., Kiderbayeva A., Tursuniov Q. Krotalyariya osimligidan siderat sifatida foydalanish imkoniyatlari. Materials of international scientific-practical conference "Sostoyaniye selekcii I semenovodstva khlopchatnika I perspektivy yevo razvitiya. – Tashkent, 2007, - P. 270-272.
3. Asilbekova D.T., Ulchenko N.T., Rakhimova N.K., Nigmatulaev A.M., Glushenkova A.I. Lipidy semyan Crotalaria alata i Guizotia abyssinica. Khimiya prirodnykh soyedeneniy. – Tashkent, 2005, №5. – 488-489 p.
4. Abdul-baki, A.A., H.H. Bryan, G.M. Zinati, W. Klassen, M. Codallo, and N. Heckert. Biomass yield and flower production in sunny hemp: Effect of cutting the main stem. J. Veg. Crop Sci. 2001.7:83-104.
5. Baird, G.B., M. Rodriguez, B. Martinez, and P. Sanchez. 1957. *Crotalaria juncea*-a green manure. DIA Boletin de Divulgacion 2. Havana, Cuba.
6. Cook. C.G and White G.A. Crotalaria juncea: a potential multi-purpose fiber crop. In J. Janick (ed.), Progress in new crops. ASHS Press, Arlington, VA. 1996. p. 389- 394
7. Duke J.A. 1983. Handbook of energy crops NewCROP(New Crops Resource Online Program), Purdue Univ. Center for New Crops and Plant Products.
8. Mannetje L.T. Crotalaria juncea L. FAO. Accessed 25 June 2012.
9. Purseglove J. W. Tropical crops: Dicotyledons. Longman Group Limited, London. 1974.
10. Rotar, P.P. and Joy R. 'Tropic Sun' sunny hemp, Crotalaria juncea L. Univ. of Hawaii, College of Tropical Agr. and Human Resources, Tropical Ag. and a series of 36 studies on human resources. 1983. 7. Pp.
11. Sarkar S. K., Hazra S. K., Sen H. S, Karmakar P. G., Tripathi M.K. Sunnhemp in India. ICAR-Central Research Institute for Jute and Allied Fibres (ICAR), Barrackpore, West Bengal. 2015.
12. Ulemale, R.B., Giri, D.G., and Shivankar, R.S. Effect of sowing date, row spacing and phosphate level on biomass studies in sunn hemp. Journal of Maharashtra Agricultural Universities. 2001. 26 (3): PP. 323-325.
13. Tripathi M. K., Chaudhary B., Sarkar S. K., Singh S. R., Bhandari H. R., Mahapatra B. S. Performance of sunn hemp (*Crotalaria juncea* L.) as a summer season crop for fibre. J. Agric. Sci., 2013. 5 (3): PP. 236-242.
14. **UDK:631.548.1**