

A STUDY OF INFLUENCE OF SOWING TERMS AND NORMS ON CROTALARIA JUNCAE GRAIN YIELD

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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 hektare 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 75th anniversary of the academician A.I. Imomaliyev. Tashkent, 2006. pp.177-179.
2. Aberkulov M, Kiderbayeva A, Tursuniov Q. Krotalyariya osimligidan siderat sifatida foydalanish imkoniyatlari. Materials of international scientific-practical conference “Sostoyaniye selektsii I semenovodstva khlochatnika I perspektivy yeyo razvitiya. Tashkent, 2007. pp. 270-272.
3. Asilbekova DT, Ulchenko NT, Rakhimova NK, Nigmatulaev AM, Glushenkova AI. Lipidy semyan *Crotalaria alata* i *Guizotia abyssinica*. *Khimiya prirodnykh soyedeneniy*. Tashkent, 2005;(5): 488-489.
4. Abdul-baki AA, Bryan HH, Zinati GM, Klassen W, Codallo M, Heckert N. Biomass yield and flower production in sunny hemp: Effect of cutting the main stem. *J. Veg. Crop Sci.* 2001;7:83-104.
5. Baird GB, Rodriguez M, Martinez B, Sanchez P. 1957. *Crotalaria juncea*-a green manure. *DIA Boletin de Divulgacion*. Havana, Cuba. 1957.
6. Cook CG, White GA. *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 JA. *Handbook of energy crops New CROP (New Crops Resource Online Program)*, Purdue Univ. Center for New Crops and Plant Products. 1983.
8. Purselove JW. *Tropical crops: Dicotyledons*. Longman Group Limited, London; 1974.
9. Sarkar SK, Hazra SK, Sen HS, Karmakar PG, Tripathi MK. *Sunn hemp in India*. ICAR-Central Research Institute for Jute and Allied Fibres (ICAR), Barrackpore, West Bengal. 2015. p.136.
10. Ulemale RB, Giri DG, Shivankar RS. Effect of sowing date, row spacing and phosphate level on biomass studies in sunn hemp. *Journal of Maharashtra Agricultural Universities*. 2001;26(3):323-325.
11. Tripathi MK, Chaudhary B, Sarkar SK, Singh SR, Bhandari HR, Mahapatra BS. Performance of sunn hemp (*Crotalaria juncea* L.) as a summer season crop for fibre. *J. Agric. Sci.*, 2013; 5 (3): 236-242.