

EFFECT OF PLANTING GEOMETRY AND SEEDLING DENSITIES ON LIGHT INTERCEPTION IN RICE CULTIVATION

Damini Thawait*, S.K. Dwivedi, Srishti Pandey and Manish Kumar Sharma

Department of Agronomy, Indira Gandhi Krishi Vishwavidyalaya, Raipur - 492 012 (C.G.) India

Email : daminithawait@gmail.com

Received-20.01.2015, Revised-17.02.2015

Abstracts : The optimum number of seedling densities and spacing, more number of leaves exposed to sunlight which intercepted more light. The wider spacing resulted in profuse tillering and facilitated plant for better utilization of resources, optimum planting geometries is good for growth and utilization of nutrients. It helps in better growth of plants. Higher plant height helps better LI which results in higher absorption of specific wave length of light necessary for photosynthesis that ultimately increased the yield.

Keywords : Effect, Seedling, Cultivation, Rice

REFERENCES

- Anonymous** (2012). Agricultural Outlook and Situation Analysis Reports, Quarterly Agricultural Outlook Report, Under the Project Commissioned by the Ministry of Agriculture, National Council of Applied Economic Research, New Delhi. pp. 47-48.
- Anonymous** (2013). Krishi Darshika 2013. Indira Gandhi Krishi Vishwavidyalaya, Raipur, Chhattisgarh, 2012. pp.17.
- Van der Werf, A.** (1996). Growth analysis and photoassimilate partitioning. In: *Photoassimilate Distribution in Plants and Crops*: (Eds.): E. Zamski, A. Schaffer, Source-Sink Relationship. Marcel Dekker Inc., New York, pp. 1-20.
- Biscoe, P.V. and Gallagher, J.N.** (1978). Physical analysis of cereal yield. I. Production of dry matter. *Agric. Progress*, 34-50.
- Sinclair, T.R. and Muchow, R.C.** (1999). Radiation use efficiency, In: *Advances in Agronomy*, 215-265.
- Chowdhury, S.I. and Wardlaw, I.F.** (1978). *Aus. J. Agri. Res.*, **29**: 205-223.
- Penning de Vries, F.W. et al.** (1993). Simulation Monograph. IRRI, LosBanos, Philippines, pp. 271.
- Sands, P.J. et al.** (1979). *Field Crops Res.*, **25**: 309-31.
- Munda, G. C., Chaudhry, P.B. and C. S. Patel** (1994). Variety, date of transplanting and space on high altitude rice. *Indian J. Hill Farming* 7(1) 96-98. *Rice Absts.* 19(3): 1723.
- Gangwar, K.S. and Sharma, S.K.** (1997). Influence of planting dated on productivity of traditional scented rice varieties. *IRRN.22* (1):42.
- Xie, G. H., Su, B. L., Shi, L. and Tian, A.Y.** (1996). Study on growth and dry matter production of rice. *J. China Agric. Univ.*, 1(1): 89-94.
- Verma, A.K.** (2009). Manipulation of crop geometry, nutrient, weed and water management practices under system of rice intensifications for maximizing grain yield and profitability of hybrid rice in Alfisols. *Ph.D. Thesis*, Department of Agronomy, Indira Gandhi Krishi Vishwavidyalaya, Raipur (C.G.) India. pp. 74-75.

*Corresponding Author