

EFFECT OF CALCIUM IN THE FORM OF GYPSUM ON STORAGE QUALITY AND ECONOMICS OF POTATO**Vijay Kumar Suryawanshi, Satish K. Verma and Divya Yadu***Horticulture Farm, College of Agriculture, Indira Gandhi Krishi Vishwavidyalaya, Raipur (Chhattisgarh) during Rabi 2010-11*

Abstract: The experiment was carried out at Horticulture Farm, Department of Horticulture, Indira Gandhi Krishi Vishwavidyalaya, Raipur (Chhattisgarh) during the *rabi* 2010-2011. The skin damaged tuber yield per hectare and skin damaged tuber number was found significant lowest in under T₅-80 kg ha⁻¹ FDG. Under the treatment combinations T₄- 60 kg ha⁻¹ FDG, T₆- 100 kg ha⁻¹ FDG, T₁₁-50 kg ha⁻¹ SDG and T₁₀- 40 kg ha⁻¹ split dose of gypsum at planting and earthing up performs better regards storage quality, yields attributes and vegetative parameters. In T₅-80 kg ha⁻¹ FDG given better response related to during storage at 30, 60, and 90 days after harvest found that lowest rotted tuber, tuber weight loss and skin damaged tuber number and weight.

The treatment combination 5 (T₅-80 kg ha⁻¹ FDG) and with recommended NPK @ 150:100:100 found remarkably superior to all the other treatment combinations as regards to all morphological traits, yields attributes and storage quality parameters. The results indicated that the highest gross return (Rs. 212000 ha⁻¹), net return (Rs. 141671 ha⁻¹) and benefit: cost ratio (Rs. 2.01) was obtained under T₅-80 kg ha⁻¹ FDG and with recommended NPK.

Keywords: Calcium Gypsum, Horticulture, Potato

REFERENCES

- Anonymous** (2009). Effect of calcium on improving post-harvest quality of potato, *Annual Report*. IGKV Raipur (C.G.)
- Anonymous**. (2012). Indian Horticulture Database 2012
- Anonymous**. (2012-13). Directorate of Horticulture, Govt. of Chhattisgarh, Raipur (C.G.)
- *Bangerth, F.** (1979). Calcium-related disorders of plants. *Ann. Rev. Phytopathol.* **17**:97- 122.
- Gomez, K. A. and Gomez, A. A.** (1984). Statistical procedure for Agricultural Research. John Wiley and Sons Publication 2nd edition.
- *Spillman, A.** (2003). Calcium rich potatoes It's in their genes. Syngenta, Potato gene bank, ARS National Programme: 301.