

Research Article

Potassium sources levels and its effect on growth and yield parameters of lilium

■ N.R. SATPUTE, J.M. WAGHMARE, J.D. JADHAV AND M.B. JADHAV

Received : 18.06.2013; Revised : 04.11.2013; Accepted : 14.11.2013

MEMBERS OF RESEARCH FORUM :

Corresponding author :
N.R. SATPUTE, Zonal Agriculture
Research Station Krishak Bhavan,
SOLAPUR (M.S.) INDIA
Email: satputenitin1@gmail.com

Co-authors :
J.M. WAGHMARE, J.D. JADHAV AND
M.B. JADHAV, Zonal Agriculture
Research Station Krishak Bhavan,
SOLAPUR (M.S.) INDIA

Summary

Potassium plays an important role in maintaining the yield, quality and vase life of flower crops. The present investigation was undertaken to study the effect of different sources and levels of potassium fertilizers on yield, quality and nutrient uptake by lilium grown under polyhouse conditions at High-Tech Floriculture and Vegetable Project, College of Agriculture, Pune (M.S.). The periodical observations *viz.*, number of leaves per plant, plant height, stem diameter, plant spread, number of flowers per m², number of flowers per plant, vase life of flower and uptake of nutrients by plant were recorded. The studies indicated that sulphate of potash was better source of potassium for lilium, while muriate of potash showed not much beneficial effects on yield, quality and nutrient uptake at later stage *i.e.*, after 45 days of planting that might be due to accumulation of chlorine in root zone. Application of 100% dose of K showed beneficial effects on lilium, higher application of K had not shown any favorable effect on yield. Looking to yield, the use of sulphate of potash @ 200 mg per plant per week through out plant growth period with recommended doses of N, *i.e.* 400 mg N/week before flowering (up to 45 days) and 200 mg N after flowering, along with recommended dose of 'P' and micronutrients was found suitable for lilium grown on soil media under polyhouse conditions.

Key words : Potassium sources, Growth parameters, Lilium

How to cite this article : Satpute, N.R., Waghmare, J.M., Jadhav, J.D. and Jadhav, M.B. (2013). Potassium sources levels and its effect on growth and yield parameters of lilium. *Asian J. Soil Sci.*, 8(2): 432-438.