

FORMULATION AND USE OF *AMPELOMYCES QUISQUALIS* AS A BIOCONTROL OF POWDERY MILDEW IN ROSES

Shruti Samant and Nasheed Shaikh

Department of Microbiology, Bhavan's College, Andheri (W), Mumbai - 400 058, India.
email: slsbha@yahoo.com

ABSTRACT – *Ampelomyces quisqualis*, a mycoparasite fungus used as a biocontrol agent against powdery mildew infection was formulated in talc and talc containing 1% Guar gum. The formulation was held at different temperature and viability studies were conducted for 90 days. Formulation containing guar gum apparently found better survival and viability of *A. quisqualis*. The germination of *A. quisqualis* spores was unaffected by metal and non metal ions like Cu, S, Mg, K, Na, Boric Acid, borax, carbonates and arsenic; natural products like neem, garlic and Reetha. However, germination of *A. quisqualis* spores was affected by 1% mercuric chloride, commercial fungicides Topas and Cursor. Talc formulations with optional presence of Guar gum apparently exhibited a one log reduction when stored at room temperature for 40days, while those stored at refrigeration for 70 days. Experimental batch of roses (*Sphaerotheca pannosa*) in polyhouses exhibited a 71% reduction in powdery mildew infection upon a single foliar spray with spores of *Ampelomyces quisqualis* as compared with unsprayed roses.

Keywords : *A. quisqualis*, biocontrol, powdery mildew, *Sphaerotheca pannosa*.