

**Isolation of bacterial endophytes for mitigating moisture stress in
groundnut
[*Arachis hypogaea* (L.)]**

M Manjusha, M Raveendra Reddy, Bh Sarvani and M Raghavendra
Department of Microbiology, Acharya N G Ranga Agricultural University,
Agricultural College, Bapatla-522101, Andhra Pradesh, India

ABSTRACT

Groundnut (*Arachis hypogaea*) in tropical and subtropical between 40°N and 40°S latitudes. It is valued for its high seed count and as such, it is the fourth most significant source of edible oil and significant source of vegetable protein of India and also an important agricultural export commodity. To increase drought tolerance in groundnut endophytic bacteria is isolated from weeds and inoculated in to groundnut crop in a pot culture experiment in which 12th isolate (CLR) *i.e.*, *Enterobacter mori* showed higher yields and less water consumption. In consortium *Enterobacter mori* showed higher yield and less water consumption with *Brady rhizobium* and *Bacillus subtilis* which is suggested as best for drought tolerance.

Key words: *Bacterial endophytes, Drought, Groundnut and Yield*