

# PHYTOPLASMA DISEASES ASSOCIATED WITH *CLEOME VISCOSA* AND *BORRERIA HISPIDA* WEEDS IN ANDHRA PRADESH, INDIA

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**Abstract:** Phytoplasma was detected in *Cleome viscosa* and *Borreria hispida* weeds by direct and nested polymerase chain reaction using universal primers P1/P7 and R16F2n/R16R2 specific to 16SrRNA gene of phytoplasma. Running of 1% agarose gel electrophoresis for confirmation of phytoplasma associated with these two weeds.

**Keywords:** Nested PCR, *Cleome viscosa*, *Borreria hispida*, Phytoplasma specific primers, 1% AGE

## REFERENCES

**Deng, S and Hiruki, C.** (1991). Amplification of 16S rRNA genes from culturable and nonculturable Mollicutes. *Journal of Microbiological Methods*. 14:53 – 61.  
**Doyle, J. J and Doyle, J. L.** (1990). A rapid total DNA preparation procedure for fresh plant tissue. *Focus*. 12: 13-15.  
**Gundersen, D. E and Lee, M. I.** (1996). Ultrasensitive detection of phytoplasmas by nested

PCR assays using two universal primer pairs. *Phytopathologia Mediterranea*. 35:144-151.  
**Purcell, A.R** (1982). Insect vector relationships with prokaryotic plant pathogens. *Annual Review of Phytopathology*. 20:397-417.  
**Waters, H and Hunt, P.** (1980). The *in vivo* three dimensional form of a plant Mycoplasma like organism by the analysis of serial ultrathin sections. *Journal of General Microbiology*. 116:111-131.

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