

**Name : Nalini Mallikarjuna Ph.D**

**Designation:** Senior Scientist

**Department/Institute:** Global Theme Biotechnology, International Crops Research Institute for Semi Arid Tropics (ICRISAT), Patancheru 502 324, Andhra Pradesh, India.

**Email:** [N.Mallikarjuna@CGIAR.ORG](mailto:N.Mallikarjuna@CGIAR.ORG)

I am interested in gene introgression from wild relatives, from compatible and incompatible gene pool, to broaden the genetic base and introduce useful traits from wild relatives of groundnut, chickpea and pigeonpea. I am presently involved in the development of synthetic groundnuts or new sources of *Arachis hypogaea* and using them to broaden the genetic base of groundnut and introduce fungal disease resistance. The emphasis in pigeonpea has been to cross wild relatives to introgress resistance to pod borers, resistance to some important pigeonpea diseases and identify new sources of cytoplasmic male sterility. Closely related wild species are being used in chickpea to introgress divergent genes for different traits and to broaden the genetic base of the crop.

### **Selected publications**

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- Nalini Mallikarjuna, Deepak Jadhav, Keshav R. Kranthi and Sandhya Kranthi, 2004. Influence of foliar chemical compounds on the development of *Spodoptera litura* (Fab.) on interspecific derivatives of groundnut, *J.Appl.Ent.*128 (5): 321-328.
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- Nalini Mallikarjuna and Sastri, D.C. 2002. Morphological, cytological and disease resistance studies of the intersectional hybrids between *Arachis hypogaea* L. and *A. glabrata* Benth. *Euphytica* 126 (2): 161-167.