

Working from the ground up

As an important oil seed crop, groundnuts (*Arachis hypogaea*) provide high quality oil and food for humans and livestock respectively. In India, low yield of this crop has been linked to non-availability of improved cultivars and proper production technologies, and to foliar diseases such as late leaf spot (*Phaeoisariopsis personata*) and rust (*Puccinia arachidicola*) especially in areas such as the Deccan plateau. The plateau is greatly affected by diseases, as it is covered with the susceptible cultivar TMV-2. These diseases are highly destructive and cause more than 70% of the losses in yield and quality. Considering the limitation in the production of groundnuts, ICRISAT has emerged with an early maturing dual-purpose cultivar, ICGV 91114, which is highly responsive to Integrated Disease Management (IDM). The IDM package consistently obtains higher pod and fodder yield under farm conditions. The IDM technology consists of improved early-maturing cultivar ICGV 91114, fungicide seed treatment with bavistin + thiram @ 2.5 g/kg seed, and one application of fungicide kavach at 65-70 days after sowing.



A healthy bunch of ICGV 91114 groundnuts

The evaluation and promotion of ICGV 91114 and its IDM technology was carried out in three phases from 1995-2004. In collaboration with ANGRAU, INGOs and NGOs, ICGV 91114 performed well, exhibiting lower severities of foliar diseases and higher pod and fodder yields. The results of *in vitro* tests at ICRISAT-Patancheru showed that the fodder from IDM-treated plots of ICGV 91114 had higher digestibility than that of TMV 2. During this period, the cultivar and its IDM technology spread to several villages in Andhra Pradesh, Karnataka and Tamilnadu states in India.

Participating farmers in all three states felt the new cultivar gave them higher quantities of pods and haulms as well as higher quality fodder that in turn translated to higher milk yields. The cultivar ICGV 91114, therefore, has rapidly become the favorite of several participating and non-participating farmers in the three states. Thanks to these advantages, ICGV 91114 and its associated IDM technology, which began with 11 farmers in 1995, spread to nearly 5000 farmers in 2002 and to about 10000 farmers by 2005.

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