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RESEARCH NOTE

# Performance of HYV of summer groundnut through front line demonstration in Chittorgarh of Rajasthan

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## SUMMARY

Summer groundnut is an important oilseed crop widely consumed in India, which plays a major role in supplementing the income of farmers. The fron tline demonstration (FLD) were conducted by the Krishi Vigyan Kendra, Chittorgarh (Rajasthan) with improved variety and package of practices in summer groundnut cultivation for two years (Summer, 2011 and 2012).The pod yield of summer groundnut crop can be increased by demonstrating their improved variety and cultivation technologies at the farmer's field under the supervision of scientists working in the operational area. During the period under study it was observed that improved variety (TG37A) pod yield of demonstration was higher (2614.16 and 2604.16 kg/ha) than the farmer's variety (Local check), where per cent increase was accounted at 22.79 and 23.02 per cent. Front line demonstration were carried out in a systematic manner on farmer's field to show the worth of a new variety and convincing farmers about potentialities of improved variety and production management practise of summer groundnut for further adoption.

**Key Words :** Groundnut, Front line demonstration, Pod yield, Improved variety

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Summer groundnut is the most important oil seed crop in India. In Rajasthan it is grown on third advanced estimate, 2011-12 is 414671 ha area and production 800633 ton. During recent year's Chittorgarh district of Rajasthan has emerged as the leading one in summer groundnut production in the state. In the district lack of suitable high yielding variety as well as poor knowledge about production practices are ascribed as main reasons for low productivity of summer groundnut. The productivity of summer groundnut area could be increased by adopting recommended scientific and sustainable management practices using a suitable high yielding variety. Taking into account the above considerations front line demonstration were carried out in a systematic manner on farmer's field to show the worth of a new variety and convincing farmers to adopt improved production management practices of summer groundnut for enhancing productivity of groundnut.

The study was conducted in Chittorgarh district of Rajasthan. The FLDs under summer groundnut crop was laid out in the four tehsels (Nimbahera,Bhadesar,Chittorgarh and Badisadri) in eight villages, namely Badi, Bagund, Surjana, Uttel, Khedi, Hoda, Kachumra and Facharsola. Regular visits by the KVK scientists to demonstration field were ensured and made to guide the farmers. These visits were also utilized to collect feedback information's for further improvement in research and extension programmes. Field days and group meeting were also organized at the demonstration sites to provide the opportunities for other farmers to witness the benefits of demonstrated technologies.

In all full packages frontline demonstrations were conducted to convince them about potentialities of improved variety of summer groundnut 'TG37A' during summer 2011and 2012. The critical inputs were duly supplied to the farmers by

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**Table 1 : Performance of recommended high yielding variety of summer groundnut (TG37A)**

| Crop season | Tehsil | Village | No. of demonstration | Area (ha) | Pod yield (kg/ha) | | Increase in pod yield % |
|---|---|---|---|---|---|---|---|
| | | | | | TG37A | Local check | |
| Summer, 2011 | Nimbahera | Badi | 3 | 0.6 | 2596.66 | 2086.66 | 25.23 |
| | Bhadesar | Bagund | 3 | 0.6 | 2613.33 | 2126.66 | 22.88 |
| | Chittorgarh | Sujana | 3 | 0.6 | 2696.66 | 2113.33 | 20.66 |
| | Badisadri | Uttel | 3 | 0.6 | 2550.00 | 2083.33 | 22.40 |
| | **Weighted mean** | | 12 | 2.4 | 2614.16 | 2102.50 | 22.79 |
| Summer, 2012 | Chittorgarh | Khedi | 3 | 0.6 | 2713.33 | 2256.66 | 20.23 |
| | Bhadesar | Hoda | 3 | 0.6 | 2640.00 | 2170.00 | 21.65 |
| | Badisadri | Kachumra | 3 | 0.6 | 2486.66 | 2013.33 | 23.50 |
| | Nimbahera | Pachersoli | 3 | 0.6 | 2576.66 | 2033.33 | 26.72 |
| | **Weighted mean** | | 12 | 2.4 | 2604.16 | 2118.33 | 23.02 |

the KVK. Data were collected from the FLDs farmers and analysed with the suitable statistical tools to compare the pod yield of farmer's field (Local check) and FLDs field (TG37A).

The progress of front line demonstration during summer, 2011 and 2012 to exhibit the performance of recommended high yielding variety *i.e*. TG37A of summer groundnut is presented in the Table 1. The data in the Table 1 revealed that in the summer season, 2011 taking four demonstrations of summer groundnut covering 2.4 ha in four villages with variety TG37A and local check (Udalu) were planted. An average yield of 2614.16kg/ha of test variety was obtained as compared to 2102.50 kg/ha of local check, where per cent increase was accounted at 22.79 per cent. During the summer season, 2012 taking four demonstrations of summer groundnut covering 2.4 ha in four villages with variety TG37A and local check (Udalu) were planted. An average yield of 2604.16kg/ha of test variety was obtained as compared to 2118.33 kg/ha of local check, where per cent increase was accounted at 23.02 per cent. Similar yield enhancement in different crop in front line demonstration has amply been documented by Dhaka *et al.* (2010), Patil *et al.* (2010), Yadav *et al.* (2007) and Singh and Sharma (2004), for these results it is evident that the performance of improved variety was found better than the local check under local conditions. Farmers were motivated by result of improved variety and agro technologies applied in the FLDs trials and it is expected that they would adopt these improved variety and technologies in the coming years. In all the years front line demonstration had a increase in pod yield of demonstrations over farmer practices (local check).

## REFERENCES

Dhaka, B.L., Meena, B.S. and Suwalka, R.L. (2010). Popularization of improved maize production technology through front line demonstration in south-eastern Rajasthan. *J. Agric. Sci.*, **1**(1):39-42.

Patil, Y.G., Mahajan, S.J., Patil, C.H., Deshetti, A.S. and Sarode, P.N. (2010). Front line demonstration – An effective tool for increasing the productivity of groundnut and soybean in Jalgaon district of Maharastra. *Internat. J. Agric. Sci.*, **6** (1):88-90.

Singh, N. and Sharma, F.L.(2004). Impact of frontline demonstration on gain in knowledge about mustard production technology among farmers. 2nd National Extension Education Congress, May 22-24, 2004. Society of Extension Education, Agra and Maharana Pratap University of Agricultural and Technology, Udaipur (RAJASTHAN) INDIA. 56.

Yadav, V.P.S., Kumar, R., Deshwal, A.K., Raman, R.S., Sharma, B.K. and Bhela, S.L.(2007). Boosting pulse production through front line demonstration. *Indian Res. J. Extn. Edu.*, **7**(2&3): 12-14.