

## Evaluation of Ber Varieties in Nalgonda District of Southern Telangana

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### ABSTRACT

*Nine varieties of Ber (Ziziphus jujuba Lam.) were evaluated for fruit yield and from 2001-2007 at Arid Horticulture Research Station, Kondamallepally, Nalgonda district of Andhra Pradesh. The varieties tested are Local, Gola, Umran, Ketaky, Tikadi, Chameli, Karki, Banarasi Karki and Ponda. Critical examination of the data revealed that the variety Gola has exhibited the highest cumulative yield (230.5 kg/Tree) over seven years followed by Karki with 168.9 kg/Tree.*

**Key words:** Ber, Varietal evaluation, Fruit yield.

### INTRODUCTION

Ber (*Ziziphus jujuba* Lam.) belongs to family Rhamnaceae is rich in vitamin C, A and B-complex. The composition varies in different varieties. The Ber leaves contain 5.6% digestible fruit protein and 49.7% total digestible nutrients making it a nutritive fodder for animals. This is an ideal fruit tree for arid and semi arid regions due to the deep root system. The Ber is valued for its nutritional qualities, prolific and regular bearing habit and adaptability to adverse soil and climatic conditions (Jawanda and Bal, 1978). The Good productivity and ability to stand transport and

storage makes Ber more popular for commercial cultivation (Pareek, 1983). The commercial cultivation of Ber in India is mainly in Punjab, Haryana, Rajasthan, Gujarat, Madhya Pradesh, Maharashtra and Andhra Pradesh. As the varietal performance will vary from region to region it was felt necessary to identify suitable variety to the climatic conditions for this area. In the present study, the important varieties of Ber viz., Gola, Umran, Ketaky, Tikadi, Karki, Banarasi Karki, Chameli and Ponda along with Local check variety are studied.

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## MATERIALS AND METHODS

The present study was conducted at Dr.YSR Horticulture University, Arid Horticulture Research Station, Konda Malleshpally, Nalgonda district during the period of 2001 to 2008. The Station falls under southern zone of Telangana (Latitude 17.0586693 and Longitude 17.265585) with average rainfall of 560 mm and mean temperatures of 17°C minimum and 40°C maximum. The soils are calcareous shallow red chalka type. The trial was conducted in non replicated model with 9 varieties with 5 plants in each row with a spacing of 6x6 meters. Recommended package of practices were followed to grow the trees. The varieties viz., Local, Gola, Umran, Ketaky, Tikadi, Chameli, Karki, Banarasi Karki and Ponda. These varieties were planted during August 1995-96. The data on fruit yield

was recorded from 2001-2008 and the cumulative yield data was collected.

## RESULTS AND DISCUSSION

Perusal of the data (Table.1) revealed that the cumulative fruit yield over seven years ranged from 104.1 kg to 230.5 kg/tree. The variety, Gola has recorded the highest cumulative fruit yield (230.5 kg/plant) followed by Karki (168.9 kg/plant), Umran (165.7 kg/plant), Ketaky (152.7 kg/plant), Banarasi Karki (146.1 kg/ plant), Chameli (116.5 kg/tree), Tikadi (110.2 kg/tree) and Ponda (107.8 kg/tree) and the lowest cumulative fruit yield was recorded in local variety with 104.1 kg/tree. The superior performance of Gola variety might be due to it's well adaptation to the local climatic and soil conditions.

**Table. 1: Cumulative fruit Yield of Ber varieties (2001-2007)**

S. No	Name of Variety	Average fruit yield (kg/Tree)							Cumulative fruit yield (kg/Tree) (2001-2007)
		2001	2002	2003	2004	2005	2006	2007	
1	Local	9.8	14.2	15.1	16.2	17.6	12.8	18.4	104.1
2	Gola	23.4	38.6	40.8	42.0	36.0	17.2	32.5	230.5
3	Umran	19.5	31.4	32.0	21.2	25.8	13.2	22.6	165.7
4	Ketaky	17.4	26.6	27.4	24.5	21.5	10.8	24.5	152.7
5	Tikadi	5.8	15.6	33.8	19.1	15.2	4.2	16.5	110.2
6	Chameli	10.1	12.2	18.6	25.5	18.8	11.7	19.6	116.5
7	Karki	19.0	25.8	24.2	35.4	27.2	12.6	24.7	168.9
8	Banarasi Karki	20.6	29.2	28.7	30.4	22.8	14.4	24.4	146.1
9	Ponda	8.1	16.3	20.5	22.5	17.4	7.4	15.6	107.8

## CONCLUSION

From this study, it can be concluded that the variety Gola may be recommended for cultivation under the calcareous soils of southern zone of Telangana as it has exhibited superior performance over all the other varieties.

## REFERENCES

- Jawanda, J S and Bal, 1978. The Ber : Highly paying and rich in food value. *Indian Horticulture* 23: 19-21.
- Pareek, O P 1983. *The Ber*. ICAR, New Delhi