

Losses Due to Bird Damage in Different Jujube Cultivars

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Abstract : Studies to assess the extent of bird damage to different *Zizyphus mauritiana* cultivars were carried out for three consecutive fruiting seasons. A mean fruit loss of 13-20% was recorded in different cultivars in guarded orchards. The birds did not exhibit preference for any particular cultivar in field. The maximum injury was inflicted to the semi-ripe fruits, followed by ripe and unripe fruits.

Key words : Bird losses, jujube.

Fruits of jujube, *Zizyphus mauritiana* Lamk., are damaged by a number of birds during the winter season in the arid and semi-arid regions of western Rajasthan. Besides other birds, parakeets, bulbuls and parrots inflict considerable injury to the developing fruits. Grewal and Kapoor (1986) have reported the damage to *ber* by *Psittacula krameri*, *Corvus splendens* and *Acridotheres*

ginginianus in Punjab. No precise estimate about the extent of losses due to Avian pests in *Z. mauritiana* is available for the arid and semi-arid regions of western Rajasthan, where this fruit plant is cultivated in pure and mixed stands. In these areas, there is no other crop available for a variety of birds to feed upon during the fruiting season of *ber* and therefore, quite a large

Table 1. Extent of bird damage to different *ber* cultivars (mean of three replications)

| Cultivar | Per cent fruit damage | | | Mean |
|------------------|-----------------------|---------|---------|-------|
| | 1985-86 | 1986-87 | 1987-88 | |
| Aliganj | 30.47 | 12.83 | 11.61 | 18.30 |
| Bagwadi | 33.18 | 14.29 | 12.62 | 20.03 |
| Banarasi Kadka | 15.45 | 15.69 | 13.54 | 14.89 |
| Banarasi Pebandi | 28.69 | 11.52 | 13.24 | 17.82 |
| Chhuhara | 17.05 | 17.74 | 13.95 | 16.25 |
| Dandan | 24.80 | 14.93 | 10.59 | 16.77 |
| Gola | 14.27 | 17.58 | 10.42 | 14.09 |
| Ilaichi | 13.18 | 18.97 | 12.66 | 14.94 |
| Jogia | 13.27 | 19.98 | 13.60 | 15.62 |
| Kali | 26.83 | 10.60 | 12.99 | 16.81 |
| Kaithli | 21.77 | 12.12 | 10.02 | 14.64 |
| Katha Alwar | 14.42 | 17.90 | 10.22 | 14.18 |
| Mahrawali | 19.69 | 11.31 | 9.24 | 13.41 |
| Mundia | 22.84 | 13.84 | 11.99 | 16.22 |
| Rashmi | 27.25 | 14.28 | 11.09 | 17.54 |
| Sanor 5 | 15.22 | 17.82 | 8.91 | 13.98 |
| Seb | 19.89 | 14.53 | 11.45 | 15.29 |
| Sunahri Gola | 24.86 | 10.02 | 10.41 | 15.10 |
| Tikadi | 26.04 | 10.62 | 7.66 | 14.77 |
| ZG 3 | 17.93 | 19.39 | 10.05 | 15.79 |
| S Em± | | | | NS |