

was titrated against previously standardized 2-6, dichlorophenol-indophenol reagent. The details of the extraction procedures were similar to those followed by Ghosh *et al.*² The data are presented in Table I.

TABLE I
Showing vitamin C content (in mg. per 100 gm. of fruit pulp) of healthy and infected mangoes and percentage loss in vitamin C†

| | Vitamin C content | | | | | Percentage loss in vitamin C after 10 days of incubation |
|--------------------|--------------------|-------|------|------|------|--|
| | Days of incubation | | | | | |
| | 2 | 4 | 6 | 8 | 10 | |
| <i>Dashehari</i> : | | | | | | |
| Healthy .. | 20.0 | 18.7 | 16.1 | 13.0 | 11.7 | 42.9 |
| Infected .. | 16.0 | 7.4 | 4.2 | 3.0 | 2.1 | 89.7 |
| <i>Langra</i> : | | | | | | |
| Healthy .. | 110.0 | 107.3 | 99.8 | 86.5 | 75.1 | 32.6 |
| Infected .. | 98.2 | 53.1 | 26.2 | 8.5 | .. | 100.0 |

† The vitamin C content of *Dashehari* and *Langra* varieties at the beginning of experiment ('Zero' day of incubation) per 100 gm. of fruit pulp were 20.5 mg. and 110.2 mg. respectively.

From Table I it is obvious that the *Langra* variety contained more of vitamin C as compared to *Dashehari*. With the progress of the incubation the vitamin C content of both healthy and infected fruit decreased. In healthy fruits the loss of vitamin C in storage was greater in *Dashehari* as compared to *Langra*, whereas in the infected fruits the case was just the reverse.

The loss of vitamin C (L-ascorbic acid) may be related to its rapid oxidation (by the enzyme ascorbic acid oxidase or due to the host-parasite interaction) to the diketone lactone form, dehydro-L-ascorbic acid.

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EFFECT OF *BOTRYODIPLODIA* INFECTION ON THE VITAMIN C CONTENT OF MANGO FRUIT*

STEM-END rot, caused by *Botryodiplodia theobromae* Pat. is one of the important post-harvest diseases of mango (*Mangifera indica* L.). The disease has been reported from India³ and Ceylon.¹ The present investigation was undertaken to study the effect of *Botryodiplodia* infection on the vitamin C content of two important varieties of mango, *viz.*, *Dashehari* and *Langra*.

For this purpose both the varieties were inoculated with pure cultures of *B. theobromae* and were incubated at 25° ± 1° C. After the interval of every 48 hours the free ascorbic acid content of the tissue adjacent to the inoculated region was determined. Vitamin C was extracted in 5% metaphosphoric acid and

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