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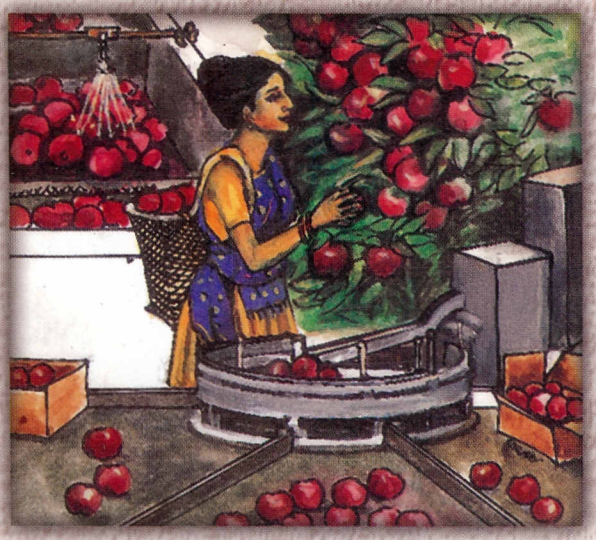

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CONTENTS

1171 SINGH, T; ROY, SK; CHOUDHURY, B. 1986. **Studies on the ripening of tomato for processing**. *Sixth convention of food scientists and technologists*. 1986: 13-15 March). Hotel Oberoi towers, Bombay:

1172 THAKUR, NS; LAL, BB; JOSHI, VK. 1994. **Evaluation of different hybrids and commercial varieties of tomato grown in Himachal Pradesh for processing**. *Int. Hort. Cong.* (Kyoto, Japan).

1173 TIKOO, SK. 1987. **Breeding tomatoes for processing in India; present status and future prospects**. *Acta Horticulturae*, No. 200, 73-81.

This survey deals briefly with the varieties used for processing in India, varietal screening for processing quality, and breeding objectives (including improved total soluble solids content and disease resistance, use of F1 hybrids and F2 populations and the development of cultivars, carrying the jointless gene, suitable for once-over harvesting after ethrel treatment).

BRINJALS

Storage and storage decay

1174 GADAKH, SR; SUPE, VS; JOSHI, VR; LAWANDE, KE. 1990. **Studies on keeping quality of some promising cultivars of brinjal (*Solanum melongena L.*)**. *South Indian Horticulture*, 38: 5, 276-278.

Fruits of 6 aubergine cultivars and 4 hybrids, harvested on 12 Jan., were packed in polyethylene bags and stored in ambient conditions (29.6°C and 69.6% RH) for up to 9 days. The control fruits were not packed in polyethylene. The fruits were assessed for weight loss and general appearance at the end of storage. The data are tabulated. On the 9th day, in the controls, fruit weight loss was highest in Manjari Gota (53.2%) and lowest in Poona Selection X Pragati (22.8%); the respective figures for these cultivars when fruits were packed were 15.2 and 8.8%. Under packed conditions the lowest weight loss (7.2%) and highest consumer acceptability at the end of storage were noted in cv. Ruchira.

1175 KUMAR, A; AULAKH, KS; GREWAL, RK. 1986. **Incidence of fungal fruit rots of brinjal in Punjab**. *Indian Phytopath.*, 39: 3, 482-485.

Of 13 fungi isolated from diseased aubergine fruits, *Aspergillus nidulans*, *Colletotrichum capsici*, *Fusarium semitectum* [*F. pallidoroseum*] and *Phomopsis vexans* were more prevalent in the field and *Cephalosporium acremonium [Acremonium strictum, Curvularia lunata [Cochliobolus lunatus]* and *Fusarium moniliforme* [*Gibberella fujikuroi*] in markets while *Rhizopus stolonifer* occurred in both the field and markets. Descriptions are given of the symptoms and aetiology of various dry and soft rots. *A. nidulans*, *Chaetomium erraticum and Drechslera tetramera* are newly recorded as fruit rot pathogens of this crop in India.

1176 MEHTA, A; MEHTA, P. 1989. **Pathological studies on fruit rot of *Trichosanthes dioica* and *Solanum melongena* caused by *Fusarium* species**. *Indian Phytopathology*, 42: 1, 192-195.

F. oxysporum and *F. moniliforme* [*Gibberella fujikuroi*] were isolated from diseased *T. dioica* and *aubergines* collected from local markets and fields in Saugor, India. Healthy fruits were inoculated with 3-, 5-, 8-, 11- and 14-d-old cultures of *F. oxysporum* and *G. fujikuroi* and incubated at 8-45°C and 98% RH. *F. oxysporum* easily caused infection on healthy *T. dioica* without injury but *G. fujikuroi* could not infect healthy *aubergines* without injury. Infection through injuries caused by a sterilized knife or pricking with a sterilized needle was more successful than infection through the stalk end. Maximum rot was observed at 28° for both organisms. High temp. protected the host but also degraded nutritive value. Maximum rot development occurred when fruits were inoculated with 5- or 8-d-old spore/mycelial disc of inoculum.

1177 MISHRA, D; RATH, GC. 1986. **Changes in dry matter and mineral contents of brinjal fruits due to fusarial rots**. *Indian Phytopathology*, 39: 4, 584-585; 11 ref.

Postharvest decays of *aubergines* caused by *Fusarium moniliforme* [*Gibberella fujikuroi*], *F. equiseti*, *F. oxysporum* and *F. solani* resulted in increases in total N and decreases in dry matter, P, K and Ca.

1178 MISHRA, D; RATH, GC. 1986. **Factors affecting rotting of brinjal fruits caused by four species of *Fusarium***. *Indian Journal of Mycology and Plant Pathology*, 16: 3, 277-279; 8 ref.

F. moniliforme [*Gibberella fujikuroi*], *F. equiseti*, *F. oxysporum* and *F. solani* caused severe losses in *aubergines*. When young fruits were exposed to 8-d-old isolates of the fungi under warm (30°C), humid (90% RH) storage conditions, heavy decay developed.

1179 SAHOO, RC; RATH, GC; MISHRA, D. 1989. **Rotting of brinjal and chilli in Orissa**. *Orissa Journal of Agril. Res.*, 2: 3-4, 208-209; 9 ref.

Rotting aubergine fruits from 4 different markets yielded isolates of *Aspergillus flavus*, *A. niger*, *Curvularia*

lunata [*Cochliobolus lunatus*] and *Rhizopus arrhizus*. Rotting of *Capsicum* was caused by *A. fumigatus*, *A. niger*, *Fusarium solani* and *R. arrhizus*.

1180 SINGH, BP; BHUTANI, RD; PANDITA, ML. 1989. **Storage studies of brinjal varieties: a note**. *Haryana Journal of Horticultural Sciences*, 18: 1-2, 142-145; 6 ref.

In one trial, fruits of 6 aubergine cultivars were stored in open baskets under ambient conditions for up to 6 days. In another trial, fruits of 4 cultivars were treated with 12% mustard oil or 12% Waxol, packed in shredded paper in baskets, and stored at room temperature for up to 9 days. In the first trial, the least physiological weight loss was observed in cv. S-4 and it was the only cultivar in fair condition after 4 days of storage; all other cultivars were either in poor or unacceptable condition after 4 days. In the second trial, fruits treated with Waxol had the best appearance and the least physiological weight loss. Of the cultivars tested, P-8 showed least weight loss and Pusa Purple Long the most.

PEAS

Postharvest handling

1181 MISHRA, D; RATH, GC. 1989. **Comparative rotting ability of *Fusarium* species causing postharvest fruit rot of brinjal**. *Orissa Journal of Agricultural Research*, 2: 1, 72-73.

All 4 F. spp. (*F. solani*, *F. moniliforme* [*Gibberella fujikuroi*], *F. oxysporum*, *F. equiseti*) tested caused rotting of aubergine fruits though the degree varied, *F. solani* being the most virulent. Cultivars differed in their reaction; *Cuttack pendi*, Satasankha local and Cuttack local showed resistance to 1 or more of the species and may prove useful in a breeding programme.

1182 BISHNOI, S; KHETARPAUL, N. 1994. **Protein digestibility of vegetables and field peas (*Pisum sativum*) - varietal differences and effect of domestic processing and cooking methods**. *Plant Foods for Human Nutrition*, 46: 1, 71-76.

Protein digestibility was found to be 60.4 to 66.5 percent in raw unprocessed seeds of different pea cultivars. Protein digestibility (in vitro) was improved by the common methods of domestic processing and cooking including soaking, dehulling, ordinary cooking, pressure cooking and sprouting of legume grains. Pressure cooking had more pronounced effect on protein digestibility followed by ordinary cooking, sprouting, soaking for 18 h and (12 h) and dehulling. Pressure cooking of soaked and dehulled seeds was noticed to give most improved protein digestibility.

1183 BROWN, DL; CHAVALIMU, E. 1985. **Effects of ensiling or drying on five forage species in western Kenya: *Zea mays* (maize stover), *Pennisetum purpureum* (Pakistan Napier grass), *Pennisetum* sp. (bana grass), *Impomea batata* (sweet potato vines) and *Cajanus cajan* (pigeon pea leaves)**. *Animal Feed Science and Technology*, 13: 1/2, 1-6; 6 ref.

Tropical livestock production systems are enhanced when suuplus wet-season feeds can be preserved for use during dry seasons. For this reason, new locally feasible preservation methods were tested on locally available feeds at Maseno, western Kenya. Values for the chemical composition of fresh, dried and ensiled maize stover, Napier grass, bana grass, sweet-potato vines and pigeon pea leaves were compared. Silage and hays preserved nutrients with equal efficiency, except for sweet-potato vine silages. The sweet-potato silages suffered a shift of protein into the acid detergent insoluble fraction, representing a loss of 37 g plant crude protein/kg silage DM. Only 15 g crude protein/kg DM was damaged when sweet-potato vines were dried.

1184 KANAWADE, VL; NARAIN, M. 1993. **Effect of pre-treatment and drying air temperature on quality of peas dehydrated in fluidized bed dryer**. *Journal of Food Science and Technology -Mysore*, 30: 2, 118-120.

Data on pretreatments (pricking and blanching) and drying air temperatures (60-90°C) on rehydration ratio and sensory characteristics of peas (Variety:'Arkel') dehydrated in fluidized bed dryers showed that the effect of pricking was more prominent than blanching. Temperature also affected texture and flavour. Drying air temperatures of 70-80 -degrees-C with pricking and blanching were found to be the optimum treatments for pea dehydration in fluidized bed.

1185 MOORE, DL; MCCRACHEN, VA. 1991. **Evaluation of consumer response to generic promotion of dry peas in Pakistan**. *Economic effects of generic promotion programs for agricultural exports: Proceedings of a Symposium on evaluating economic effects of generic promotion programs for agricultural exports*. (Washington, DC: 1990: 22-23 Feb)/edited by JP Nichols; HW Kinnucan; KZ Ackerman. p. 158-171; 15 ref.

Peas are an important traditional and favoured food in the Pakistani diet, and have a large potential to be a