CHAPTER 19: GRADING – METHODS OF GRADING, EQUIPMENTS FOR GRADING OF FRUITS AND VEGETABLES, CARE AND MAINTENANCE

Sorting Bench

IARI Fruit and Vegetable Grader
Divergent roller type fruit sorting machine for lemon and sapota, MPKV, Rahuri

Divergent rails/slits size mango grader. CISH, Lucknow
Fruit and Vegetable Grader for Tomato & Mango

Capacity = 500 Kg/h
Power requirement = ½ HP electric motor
Efficiency = 85 – 90%

Plate 3.5 Orange grading (weight basis) machine in operation
Plate 3.4 Electronic laser sensing assembly of orange grading machine
Optical Grader for Apples
(Colour Grading)

Optical Grader for Fruits
(Delayed Light Emission)
Mango grader

Potato grader

Features
- Capacities range from 5 tonne/hr to 30 tonne/hr
- Washing
- Dry brushing lines
- Sizing
- Bagging lines
Onion grader

Features
- Capacities range from 8 tonne/hr to 30 tonne/hr
- Bulk receipt
- Top and tailing
- Sizing
- Bagging lines

Sweet Potato Sorter

Electronic sizer for sweet potato
Grader for sweet potato

Belt grader

- Used to separate round from other shaped seeds/parts or weeds in flower, herb, tree, cactus and vegetable seeds.
- For vegetable seeds separation of triangular or sharp shaped seed from round spinach seed
Indented cylinder grader

- Used for separating plant parts and weeds in carrot, onion and lettuce, but also for flower seeds like marigold and impatiens.
- Used for calibrating the seeds based on their length to obtain more uniformity to produce seed pellets.