

SCHEDULE -XXXV
GRADE DESIGNATION AND QUALITY OF MANDARINS

1. Mandarins shall be obtained from varieties (cultivars) of Mandarins, tangerines and their hybrids grown from species of *Citrus reticulata* Blanco including Satsumas (*Citrus unshiu* Marcow), Clementines (*Citrus clementina* Hort. ex. Tan.), Common mandarins (*Citrus deliciosa* Tan.) and tangerines (*Citrus tangerina* Hort. ex. Tan.) grown from these species and their hybrids including "Kinnow" (*Citrus nobilis* x *Citrus deliciosa*) of the *Rutaceae* family.

2. **MINIMUM REQUIREMENTS:**

A. Quality requirements:

- (i) Mandarins shall be:-
- (a) firm;
 - (b) whole, undamaged;
 - (c) fresh in appearance;
 - (d) sound, with characteristic shape of the variety;
 - (e) clean, free of any visible foreign matter;
 - (f) free of damage caused by low temperature or high temperature;
 - (g) free of damage caused by frost;
 - (h) free from damage caused by pests or diseases;
 - (i) free from abnormal external moisture, excluding condensation following removal from Cold storage;
 - (j) free of any foreign smell and/or taste;
 - (k) free of signs of internal shriveling;
 - (l) free of bruising and/or extensive healed over cuts.
- (ii) The stalk shall be removed close to the fruit keeping the button intact.
- (iii) They shall comply with the residue levels of heavy metals, Pesticides and other food safety parameters as laid down by the Codex Alimentarius Commission for exports.
- (iv) Mandarins shall have minimum diameter of 54 mm.

B. Maturity requirements:

I. Colouring:

- (a) Colouring shall be typical of the variety on at least one fifth of the surface of the fruit.
- (b) Mandarins produced in areas with high air temperature and high relative humidity conditions during the development period can be of a light green colour exceeding four fifth of the total surface area, provided they satisfy the criteria mentioned in II, III and IV.

II. Minimum Juice content:

Juice content is calculated in relation to the total weight of the fruit and after extraction of the juice by means of a hand press.

- (a) Clementines and Tangerines 35 %
- (b) Varieties "Nagpur"
& "Coorg" with four fifth
of the surface green 35 %
- (c) "Khasi" Mandarins 35 %
- (d) "Kinnow" hybrid 40 %
- (e) Satsumas 33 %
Other mandarin varieties
and their hybrids

III. Minimum Total soluble solids Content:

T.S.S. - minimum 10 degree Brix.

IV. Minimum Total soluble solids: acid ratio.

TSS: Acid ratio in juice- 12: 1

3. CRITERIA FOR GRADE DESIGNATION:

Grade designations	Grade requirements	Grade tolerances
1	2	3
Extra class	Mandarins shall be of superior quality. They shall be characteristic of the variety and/or commercial type in shape, external appearance, development and colouring. They shall be free of defects, with the exception of very slight superficial defects provided these do not affect the general appearance of the produce, the quality, the keeping quality and presentation in the package. Mandarins must be uniform in colour.	5 % by number or weight of Mandarins not satisfying the requirements of the grade, but meeting those of Class I grade or, exceptionally, coming within the tolerances of that grade.
Class I	Mandarins shall be of good quality. They shall be characteristic of the variety and/or commercial type. Following slight defects may be there, provided these do not affect the general appearance of the produce, the quality, the keeping quality and presentation in the package.- - slight defects in shape, - slight defects in colouring, - slight skin defects occurring during the formation of the fruit, such as silver scurf, russets etc., - slight healed defects due to mechanical cause such as hail damage, rubbing;	10 % by number or weight of Mandarins not satisfying the requirements of the grade, but meeting those of Class II or, exceptionally, coming within the tolerances of that grade.

	- damage from handling. The defects shall not, in any case, affect the pulp of the fruit.	
Class II	This grade includes Mandarins which do not qualify for inclusion in the higher grades, but satisfy the minimum requirements. Following defects may be there, provided Mandarins retain their essential characteristics as regards the quality, the keeping quality and presentation in the package. - defects in shape, - defects in colouring, - slight skin defects occurring during the formation of the fruit, such as silver scurf, russets etc., - skin healed defects due to mechanical cause such as hail damage, rubbing, - damage from handling, Slight puffing of fruit is allowed. The defects shall not, in any case, affect the pulp of the fruit.	10 % by number or weight of Mandarins not satisfying the requirements of the grade, but meeting the minimum requirements. With in this tolerance, a maximum of 5 % may be fruits showing slight superficial unhealed damage, dry cuts or soft and shriveled fruit.

4. OTHER REQUIREMENTS:

- (i) The Mandarins shall have been carefully picked and have reached an appropriate degree of development and display satisfactory ripeness in accordance with criteria proper to the variety and to the area in which they are grown. The development and condition of the Mandarins must be such as to enable them;
 - to withstand transport and handling, and
 - to arrive in satisfactory condition at the place of destination.
- (ii) The content of each package shall be uniform and contain only Mandarins of the same origin, variety, quality, size, same degree of ripeness and development.
- (iii) The use of any substance tending to modify the natural characteristics of the Mandarins, especially its taste or smell is prohibited.
- (iv) The Mandarins shall be presented :
 - i. Arranged in regular layers in packages. It is mandatory for "Extra Class" and optional for Class I and II.
 - ii. Not arranged in regular layers in packages. This presentation is only allowed for Class I and II.

5. PROVISION CONCERNING SIZING:

- A. Size is determined by the maximum diameter of the equatorial section of the fruit in accordance with the following table.

Size scales:

Size Code	Diameter in mm.
A	54-61
B	62-69
C	70-77
D	78-85
E	Above 85

B. SIZE TOLERANCES:

- (i) For all classes and types of presentation : 10 % by number or weight of Mandarins corresponding to the size immediately below and/or above that mentioned on the packages, provided the maximum difference between the smallest and largest fruits does not exceed the following maxima.

Size code	Maximum difference between fruit in the same package in mm
A,B,C and D	7 mm
E	10mm

- (ii) In any case, the tolerance of 10 % applies only to fruit whose diameter is not less than 54 mm.

SCHEDULE- XXXVI GRADE DESIGNATION AND QUALITY OF LIMES

1. Limes shall be obtained from varieties (cultivars) of *Citrus aurantifolia Swingle*, a small fruited acid lime known as “key” lime , ‘Maxican’ lime ,‘Kagzi’ lime and its hybrid of the *Rutaceae* family.

2. MINIMUM REQUIREMENTS:

A. Quality requirements:

- (i) Limes shall be:-
- (a) whole;
 - (b) firm;
 - (c) intact;
 - (d) sound, with characteristic shape of the variety;
 - (e) clean, free of any visible foreign matter;
 - (f) fresh in appearance;
 - (g) free from bruising;
 - (h) free from pests affecting the general appearance of the produce;
 - (i) free from abnormal external moisture, excluding condensation following removal from cold storage;
 - (j) free from any foreign smell and/or taste;
 - (k) free from signs of internal shriveling;