

Module – 35: National and International Standards

35.1 Spices: National and International Standards

The Spices Board of India is working with International Standards Organization (ISO: 67.220.10: Spices and condiments), International Organization of Spice Trading Associations, European Spices Association, International Pepper Community, and American Spice Trade Association to achieve the goal. Different countries have set different standards for both intrinsic quality and appearance of spices and spice products. For example, the Indian and Malaysian standard for aflatoxin in spices is 30 parts per billion (ppb); in Europe it is five ppb and in the USA it is 20 ppb.

Similar campaigns have been held in the chilli growing areas of Andhra Pradesh; seed spices growing areas in Madhya Pradesh, Rajasthan, and Gujarat; nutmeg growing areas of Kerala and Tamil Nadu; small cardamom growing areas of Kerala, Tamil Nadu, and Karnataka, and large cardamom growing areas of Sikkim. Meanwhile, the Board has invested about Rs.100 crores in setting up a string of quality evaluation laboratories across India. The laboratories, already functional in Kochi, Mumbai and Guntur, have state-of-the-art equipment and trained personnel to man them.

At present, India accounts for more than 20% of the world output of pepper and is also one of the largest consumers and exporters of pepper. Kerala is the largest producer of pepper accounting for over 95% of India's total output. Pepper is cultivated in Kerala in Idukki, Kottayam, Cannanore, Calicut and Wayanad. Pepper is also cultivated in Karnataka, Tamil Nadu, A&N Islands and Pondicherry.

India is the fourth largest pepper producer in the world, with production of 67,000 metric tons in 2008. Annual white pepper contribution in India is less than 250 metric tones against the world demand of more than 1,50,000 metric tons. Indonesia is the largest white pepper producing country, converts about 50% of its pepper to white. Malaysia and Brazil convert about 10% and 5% of their pepper to white respectively.

35.2 Quality Standards:

International Standards Organization and International Organization of Spice Trading Associations recommend the following standard:

1. Spices and condiments — Determination of extraneous matter content.
2. Spices and condiments — Determination of total ash.
3. Spices and condiments — Determination of moisture content – Entrainment method.
4. Spices and condiments — sampling.
5. Spices, condiments and herbs — Determination of volatile oil content.
6. Labeling of pre-packaged foodstuffs.

35.3 Finished Spices Quality Standard

1. **Color:** The color of spices shall be analysed viz. brownish red or reddish brown.
2. **Odour and flavor:** Spices and condiments have a characteristic odour and an aromatic and sweet flavor.
3. **Freedom from insects, moulds:** Spices shall be free from living insects and shall be practically free from moulds, dead insects, insect fragments and rodent contamination visible to the naked eye (corrected, if necessary, for abnormal vision) or with such magnification as may be necessary in any particular case.
4. **Extraneous matter:** For the purposes of this Gulf Standard, all that does not belong to the star anise fruit and all other extraneous matter of animal, vegetable or mineral origin shall be considered as extraneous matter. The total percentage of extraneous matter in star anise shall not be more than 2% (m/m). The proportion of stalks shall not be more than 3 % (m/m) when determined by the specified method
5. **Broken and abnormal fruits:** Broken fruits are classified as fruits which contain fewer than five follicles, while abnormal or undeveloped fruits are categorized as those containing three or more under-developed follicles. The proportion of broken and abnormal fruits shall not be more than 25 % (m/m) when tested by the method specified.
6. **Number of fruits per 100 g:** The number of star anise fruits shall not be less than 130 per 100g when tested by the specified method.
7. **Chemical requirements:** Spices shall comply with the standard specified when tested by the specified method. Characteristic Requirement Test method include Moisture content, % (m/m), Total ash, % (m/m) on dry basis, max. Volatile oils, % (ml/100 g) on dry basis, min., etc.
8. **Packing:** Star anise shall be packed in clean and sound packages made of a material which does not affect the product but which protects it from the ingress or loss of moisture and volatile matter.
9. **Sampling:** Shall be carried out as specified.
10. **Test methods:** Samples of star anise shall be analyzed to ensure conformity with the requirements of this International Standard by following the methods of physical and chemical analysis specified.
11. **Labeling:** Without prejudice to what is stated in the ISO standards mentioned in 2.6 clause for spices and condiments, the following information shall be labeled on the containers:
 - 11.1 Name of the product and the trade name ;
 - 11.2 Name and address of the producer or packer, or trademark;
 - 11.3 Batch or code number;
 - 11.4 Net mass
 - 11.5 Producing country
 - 11.6 Destination, i.e. name of the port or the City ; and, if required,

11.7 Any other marking required by the purchaser, such as year of harvest and date of packing (if known); possibly, a reference to this Standard.

SUGGESTED READINGS:

- Green, C., *Export development of essential oils and spices by cambodia*. 2002, The International Trade Centre, Geneva [SSA-2001-468] and The Ministry of Commerce, Kingdom of Cambodia. p. 100.
- http://www.just.fgov.be/mopdf/2002/03/26_2.pdf
- International Classification for Standards, 2005, Sixth edition, ISBN 92-67-10405
UNCTAD/WTO, I.T.C., *Global Spice Markets: Imports 1996-2000*. 2002, ITC:Geneva. p.80.

