

Book review

Quality Assurance in Spices and Spice Products - Modern Methods of Analysis J S Pruthi, Allied Publishers Limited, New Delhi , 1999, pp. 576, Rs 570/-, ISBN 81 7023 896.

Spices spice the food of humans and play an important role in making our food palatable. Many spices are important in flavouring and seasoning of foods and form major ingredients in beverages and pharmaceuticals. Some like turmeric are antioxidants and are good preservatives. A few are known to be fungistatic, antimicrobial or antibiotic. They are also converted into 'value added' products of commercial importance with long shelf life such as spice oleoresins, essential oils, curry powders, etc. International trade in spices and spice products show an upward trend, with a growth increase of 3-4% annually. In the global scenario of spices trade, quality control plays an important role. Inter and intra laboratory variations in analytical results, due to adoption of different methods of analysis and standards, lead to many problems including litigation. Although India is a leading exporter of many spices and spice products, a comprehensive technical book covering all the analytical techniques for physical, chemical, physiological and microbiological examination of spices and spice products was lacking till now. The Bureau of Indian Standards (BIS) has adopted many standard methods for the evaluation of quality of spices and spice products. However, the information is so scattered that there is no reference work available where one can get all information on quality. Dr. J S Pruthi's book on 'Modern Methods of Analysis' is the answer to these constraints.

The book is divided into 2 parts comprising of 18 chapters. The first part comprises of 10 chapters on spices (whole, ground, curry powder and other spice blends); the second part covers 8 chapters

including 7 on important spice products and the last chapter is on future analytical research needs.

In Part I the book gives detailed techniques on sampling, physical properties, chemical characteristics, determination of chemical constituents like pungent principles, detection and determination of adulterants, toxic contaminants, aflatoxins and bacterial and fungal contaminations in spices and spice products and methods of sensory evaluation. In Part II, the book covers quality assessment of processed spice products. In this section the major topics covered are essential oils and oleoresins, physical and chemical characteristics of spice essential oils, olfactory assessment of spice essential oils and oleoresins, detection of contaminants and adulterants in spice essential oils, quality assessment of spice products like spice seasonings, mayonnaise, food and salad dressings, spice emulsions and concentrates, etc.

The annexure is very useful and informative where the author gives details of Agmark, PFA, BIS, ISO, ASTA, US-FDA and ISO 9000 standards. The select bibliography given at the end of each chapter is very useful to readers and researchers. The vast experience and knowledge of the author is reflected in every page of this book. Each analytical method is clearly described. Detection and determination of toxic contaminants, methods of sensory evaluation etc. are very relevant in the present global scenario of spices quality and export. The book is a must to researchers, students and quality evaluation laboratories. The book is a veritable treasure house of information on all aspects of spice quality and standards and will be a valuable addition to the library of every spice scientist and organization.

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