

CODEX ALIMENTARIUS COMMISSION



Food and Agriculture
Organization of the
United Nations



World Health
Organization

Viale delle Terme di Caracalla, 00153 Rome, Italy - Tel: (+39) 06 57051 - E-mail: codex@fao.org - www.codexalimentarius.org

Agenda Item 3

CX/MAS 21/41/3 Add.1

May 2021

Original language only

JOINT FAO/WHO FOOD STANDARDS PROGRAMME

CODEX COMMITTEE ON METHODS OF ANALYSIS AND SAMPLING

41st Session
Virtual

17-21 and 25 May 2021

ENDORSEMENT OF METHODS OF ANALYSIS AND SAMPLING PLANS FOR PROVISIONS IN CODEX STANDARDS

1. This document contains the methods of analysis (Appendix I) proposed by the Committee on Spices and Culinary Herbs (methods of analysis for provisions in the draft standard for dried oregano, draft standard for dried roots, rhizomes and bulbs — dried or dehydrated ginger, draft standard for dried floral parts-cloves, draft standard for dried basil, and the proposed draft standard for dried seeds (nutmeg).

CODEX COMMITTEE ON SPICES AND CULINARY HERBS¹

2. The Committee **is invited to endorse** the methods of analysis for provisions in the aforementioned standards.

¹ Draft REP21/SCH paras. 36, 65, 81, 116 and 150 and Appendix II, III, IV, V and VI

COMMITTEE ON SPICES AND CULINARY HERBS. (CCSCH5)**Methods of analysis for provisions in the draft standard for dried oregano**

Provision	Method	Principle	Type
Moisture	ISO 939	Distillation	I
Total ash on dry basis	ISO 939 and ISO 928	Calculation Distillation and Gravimetry	I
Acid-insoluble ash on dry basis	ISO 939 and ISO 930	Calculation Distillation and Gravimetry	I
Volatile oils on a dry basis	ISO 939 and ISO 6571	Calculation Distillation and Distillation	I
Extraneous matter	ISO 927	Visual examination followed by Gravimetry	I
Foreign matter	ISO 927	Visual examination followed by Gravimetry	I
Mammalian excreta Other excreta	Macroanalytical Procedure Manual, USFDA, Technical Bulletin V.39 B (For whole) https://www.fda.gov/food/laboratory-methods-food/mpm-v-8-spices-condiments-flavors-and-crude-drugs#v32	Visual examination	IV
Whole dead insect	ISO 927	Visual examination	IV
	MPM V-8 Spices, Condiments, Flavours and Crude Drugs A. General methods for spices herbs and botanicals (V 32) https://www.fda.gov/food/laboratory-methods-food/mpm-v-8-spices-condiments-flavors-and-crude-drugs#v32		
Mould visible	Method V-8 Spices, Condiments, Flavors and Crude Drugs (Macroanalytical Procedure Manual, FDA Technical Bulletin Number 5) https://www.fda.gov/food/laboratory-methods-food/mpm-v-8-spices-condiments-flavors-and-crude-drugs#v32	Visual examination	IV
Insect Damage	ISO 927	Visual Examination	I

Methods of analysis for provisions in the draft standard for dried roots, rhizomes and bulbs — dried or dehydrated ginger

Provision	Method	Principle	Type
Moisture	ISO 939	Distillation	I
Total Ash on dry basis	ISO 939 and ISO 928	Distillation and Gravimetry	I
Acid Insoluble Ash on dry basis	ISO 939 and ISO 930	Distillation and Gravimetry	I
Volatile Oil on dry basis	ISO 939 and ISO 6571	Distillation followed by Volumetry	I
Extraneous Matter	ISO 927	Visual Examination followed by Gravimetry	I
Foreign Matter	ISO 927	Visual Examination followed by Gravimetry	I
Insect Damage	Method V-8 Spices, Condiments, Flavors and Crude Drugs (Macroanalytical Procedure Manual) MPM: V-8. Spices	Visual Examination	IV
Whole dead insect	ISO 927	Visual examination	I
Mammalian/ Other Excreta	MPM V-8 Spices, Condiments, Flavours and Crude Drugs (Macroanalytical Procedure Manual) MPM: V-8. Spices (For whole)	Visual Examination followed by Gravimetry	IV
Mould visible	Method V-8 Spices, Condiments, Flavors and Crude Drugs (Macroanalytical Procedure Manual) MPM: V-8. Spices	Visual examination	IV
Live Insect	ISO 927 AOAC 960.51	Visual Examination Visual Examination	IV IV
Calcium (as oxide) on dry basis	ISO 1003, Annex A	Chemical reaction followed by gravimetry	IV
SO ₂	AOAC 963.20	Colorimeter	II

Methods of analysis for provisions in the draft standard for dried floral parts-cloves

Provision	Method	Principle	Type
Moisture	ASTA 2.0	Distillation	I
Volatile oil	ISO 6571	Distillation Volumetry	I
Total ash (dry basis)	ISO 928	Gravimetry	I
Acid Insoluble Ash	ISO 930	Gravimetry	I
Extraneous matter	ISO 927	Visual Gravimetry	I
Foreign matter	ISO 927	Visual Gravimetry	I
Insect damage	ISO 927 Method V-8 Spices, Condiments, Flavours and Crude Drugs	Visual Examination Visual Examination	IV IV
Insects/Excreta/Insect fragments	ISO 927	Visual Examination	IV
Crude fibre	ISO 5498	Gravimetry	I
Mould visible	Method V-8 Spices, Condiments, Flavours and Crude Drugs	Visual Examination	IV
Live insect	ISO 927	Visual Examination	IV
Mammalian or/and Other excreta	Method V-8 Spices, Condiments, Flavours and Crude Drugs	Visual Examination	IV

Methods of analysis for provisions in the draft standard for dried basil

Provision	Method	Principle	Type
Moisture	ISO 939	Distillation	I
Total Ash	ISO 928	Gravimetry	I
Acid Insoluble Ash	ISO 928 and ISO 930	Gravimetry	I
Volatile Oil	ISO 6571	Distillation Volumetry	I
Extraneous Matter	ISO 927	Visual Examination followed by Volumetry	I
Foreign Matter	ISO 927	Visual Examination followed by Volumetry	I
Insect Damage	Method V-8 Spices, Condiments, Flavors and Crude Drugs (Macroanalytical Procedure Manual, FDA Technical Bulletin Number 5)	Visual Examination	IV
Insects/Excreta/Insect Fragments	Method appropriate for particular spice from AOAC Chapter 16, subchapter 14	Visual Examination	IV
Mould damage	Method V-8 Spices, Condiments, Flavors and Crude Drugs (Macroanalytical Procedure Manual, FDA Technical Bulletin Number 5)	Visual examination (for whole)	IV
Mammalian Excreta, And Other Excreta	Method V-8 Spices, Condiments, Flavors and Crude Drugs (Macroanalytical Procedure Manual, USFDA, Technical Bulletin V.39 B) (For whole)	Visual Examination	I

Methods of analysis for provisions in the proposed draft standard for dried seeds (nutmeg)

Provision	Method	Principle	Type
Moisture content	ISO 939	Distillation	I
Total ash	ISO 928	Gravimetry	I
Acid-insoluble ash	ISO 930	Gravimetry	I
Water-insoluble ash	ISO 929	Gravimetry	I
Volatile oils content	ISO 6571	Distillation	I
Calcium content expressed as CaO	ISO 1003	Titration	I
Extraneous matter	ISO 927	Visual examination/ Gravimetry	I
Foreign matter	ISO 927	Visual examination/ Gravimetry	I
Mould visible	ISO 927	Visual examination	IV
Dead insect, insect fragments, rodent contamination	ISO 927	Visual examination	IV
Live insect	ISO 927	Visual examination	IV
Mammalian and or other excreta	Macroanalytical Procedure Manual (MPM) USFDA technical bulletin V.41	Visual examination	IV
Piece of mace	ISO 927	Visual examination	IV