



**JOINT FAO/WHO FOOD STANDARDS PROGRAMME  
CODEX COMMITTEE ON SPICES AND CULINARY HERBS**

**3<sup>rd</sup> Session**

**Chennai, India, 6 -10 February 2017**

**Draft Standard for Thyme**

**Comments at Step 6 (Replies to [CL 2016/24-SCH](#))**

(Comments of: Bolivia, Brazil, Chile, Colombia, Ecuador, Egypt, India, Mexico, Paraguay, USA and IOSTA),

**Background**

1. This document compiles comments received through the Codex Online Commenting System (OCS) in response to [CL 2016/24-SCH](#) issued in July 2016 (**Annex I**). Under the OCS, comments are compiled in the following order: general comments are listed first, followed by comments on specific paragraphs.

**Guidance for interpreting Reconciliation report**

2. The comments submitted through the OCS have been compiled in the Reconciliation report, hereby attached as **Annex I**.

3. Under the OCS, each paragraph of the **draft standard** is assigned a number (i.e. the title, section, subsections, texts, footnotes and in case of tables each grid).

4. For ease of reference, the draft standard<sup>1</sup> has been reproduced with automatic paragraph numbers as assigned by the OCS and is hereby attached as **Annex II**.

5. Columns under **Annex I** are headed as follows:

- **“Para”** refers to the paragraph number assigned to the draft standard by the OCS (the paragraph number can be found in Annex II).
- **“Text”** refers to the text of the paragraph on which a proposed change or comment has been made. This text can be either the original text (if only a comment has been made), or the proposed text (if a textual modification has also been suggested).
- **“T”** refers to the comments classification. **C** is when users provide only a comment, while **P** is when they also suggest a proposed change. In the first case, the original text with an explanation has been inserted in the system; in the second case, the revised text with or without an explanation has been inserted.
- **“Comment”** includes the comment category, the author and the full text of the comment.

6. It is recommended that the Reconciliation report (Annex I) is read side by side or in conjunction with Annex II.

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[REP16/SCH, Appendix IV](#)

## RECONCILIATION REPORT FOR THE DRAFT STANDARD FOR THYME

Para	Text	T	Comment
<u>G</u>	(General Comment)	<u>C</u>	<p><b>EDITORIAL</b> <b>USA</b></p> <p>The United States generally supports the development of a standard for dried thyme in the Codex Committee on Spices and Culinary Herbs and is pleased to submit the following specific comments in response to CL 2016/24 - SCH, Request for Comments at Step 6 on the Draft Standard for Thyme. The comments follow the sequence of the standard.</p>
<u>G</u>	(General Comment)	<u>C</u>	<p><b>TRANSLATION</b> <b>Paraguay</b></p> <p>Use the expression “Formas de presentación” instead of “estilos” throughout the Spanish version of the document because it is commonly used in the CODEX standards</p>
		<u>C</u>	<p><b>EDITORIAL</b> <b>Bolivia</b></p> <p>Standard Project revision has been made and as Bolivia we do not have any observations to the document.</p>
<u>4</u>	This Standard applies to dried leaves/ flowers of thyme ( <i>Thymus spp.</i> ) of the <i>Lamiaceae</i> family offered for industrial food production as a condiment and for direct human consumption or for repackaging if required. [It does not apply to the product when indicated as being intended for further processing.]	<u>P</u>	<p><b>SUBSTANTIVE</b> <b>Brazil</b></p> <p>This Standard applies to dried leaves/ flowers of thyme (<i>Thymus spp.</i>) of the <i>Lamiaceae</i> family offered for industrial food production as a condiment and for direct human consumption or for repackaging if required. <del>It does not apply to the product when indicated as being intended for further processing.</del> <b>It does not apply to the product when indicated as being intended for further processing.</b></p> <p>Removal of square brackets - The rationale is Not to overrule trade of Thyme in bulk for further processing with provisions established for ready to eat products, we would like to propose to limit the scope of the standard and to clearly state that it should not apply to products for further processing</p>
		<u>P</u>	<p><b>EDITORIAL</b> <b>Brazil</b></p> <p>This Standard applies to dried leaves/ flowers of thyme (<i>Thymus <del>spp</del>spp.</i>) of the <i>Lamiaceae</i> family offered for industrial food production as a condiment and for direct human consumption or for repackaging if required. [It does not apply to the product when indicated as being intended for further processing.]</p> <p>Correct writing of “spp.” (remove italics) - The correct inscription of the species acronym “spp.” precludes the use of italics. The adoption of italics for spp. in taxonomy is considered a mistake.</p>
		<u>C</u>	<p><b>TECHNICAL</b> <b>Chile</b></p> <p>Regarding the sentence [It does not apply to the product when indicated as being intended for further processing.], the concept of “further processing” is not clear, neither its implications. Therefore, it would be useful to define this concept, in order to better determine the scope of this standard.</p>

Para	Text	T	Comment
		<b>P</b>	<p><b>TECHNICAL India</b></p> <p>This Standard applies to dried leaves/ flowers of thyme (<i>Thymus spp.</i>) of the <i>Lamiaceae</i> family offered for industrial food production as <del>accondiment</del> <b>culinary herb</b> and for <del>direct human consumption or for repackaging if required.</del> [It does not apply to the product when indicated as being intended for further processing.] <b>direct consumption or for repackaging if required. It excludes Thyme intended for industrial processing.</b></p> <p>1. The word: "condiment" has a broader definition, while the scope of CCSC is for "Culinary herbs". 2. Since the standard is being developed for Codex, no specific wording like "human" is required. 3. The scope of the standard does not apply for the products when indicated as being intended for further processing, hence the statement is not appropriate</p>
		<b>C</b>	<p><b>EDITORIAL IOSTA</b></p> <p>There is a difference of opinion with European Spice Association suggesting 0.5% for processed material is too high and American Spice Trade Association supporting the value as is.</p>
		<b>C</b>	<p>Thymus spp. is too broad. Two recommendations: 1. Thymus vulgaris (as described in ISO 6754) 2. Thymus vulgaris, Thymus serpyllum, Thymus satureioides (as described in ASTA Spice List)</p>
		<b>C</b>	<p><b>EDITORIAL Egypt</b></p> <p>Keep the sentence [It does not apply to the product when indicated as being intended for further processing.]</p>
<b>4</b>	This Standard applies to dried leaves / flowers of thyme ( <i>Thymus spp.</i> ) of the <i>Lamiaceae</i> family offered for industrial production of food as condiment, for direct human consumption, or for repackaging if required. It does not apply to the product when indicated as being intended for further processing.	<b>P</b>	<p><b>EDITORIAL Colombia</b></p> <p>This Standard applies to dried leaves / flowers of thyme (<i>Thymus spp.</i>) of the <i>Lamiaceae</i> family <b>offered for the</b> (<del>offered for the</del>) industrial production of food as condiment, for direct human consumption, or for repackaging if required. It does not apply to the product when indicated as being intended for further processing.</p>
		<b>P</b>	<p><b>TECHNICAL Colombia</b></p> <p>This Standard <del>applies</del> to dried leaves / flowers of thyme (<i>Thymus spp.</i>) of the <i>Lamiaceae</i> family offered for industrial production of food as condiment, for direct human consumption, or for repackaging if required. It does not apply to the product when indicated as being intended for further processing.</p>

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			<p><b>USA</b></p> <p><b>Issue and Rationale for change:</b> The word thyme in both the title and scope should be put into quotes: “dried thyme.” As defined in the standard, any plant of the genus <i>Thymus</i> may be used as the spice “thyme”. Over 1400 species names have been published for the genus <i>Thymus</i> (1). GRIN (U.S. National Plant Germplasm System) only defines the species, <i>Thymus vulgaris</i> L. as thyme. Whereas Mansfeld’s World Database of Agricultural and Horticultural Crops not only includes all species of <i>Thymus</i> as thyme, it also defines <i>Lippiamicromera</i> Schau. And <i>Teucriummarum</i> L. as thymes (Table 1).</p> <p>One species of thyme, <i>Thymus capitatus</i> (L.) Hoffmanns. &amp; Link, known as Spanish oregano, lacks the essential oil thymol but is very rich in carvacrol, a characteristic marker for oregano (2).</p> <p>The United States recommends that “dried thyme” should be defined by its characteristic flavor and aroma as widely done in trade rather than botanically<sup>2</sup>.</p> <p><b>Table 1: Thyme from Mansfeld (<a href="http://mansfeld.ipk-gatersleben.de/">http://mansfeld.ipk-gatersleben.de/</a>)</b></p> <table border="1"> <tbody> <tr> <td><b><u>Beckland thyme</u></b></td> <td><i>Thymus serpyllum</i> L.</td> </tr> <tr> <td><b><u>caraway thyme</u></b></td> <td><i>Thymus herba-barona</i>Loisel.</td> </tr> <tr> <td><b><u>cat thyme</u></b></td> <td><i>Teucriummarum</i> L.</td> </tr> <tr> <td><b><u>conehead thyme</u></b></td> <td><i>Thymus capitatus</i> (L.) Hoffmanns. &amp; Link</td> </tr> <tr> <td><b><u>creeping thyme</u></b></td> <td><i>Thymus serpyllum</i> L.</td> </tr> <tr> <td><b><u>false thyme</u></b></td> <td><i>Lippiamicromera</i> Schau.</td> </tr> <tr> <td><b><u>garden thyme</u></b></td> <td><i>Thymus vulgaris</i> L.</td> </tr> <tr> <td><b><u>Japanese thyme</u></b></td> <td><i>Thymus quinquecostatus</i>Čelak.</td> </tr> <tr> <td><b><u>lemon thyme</u></b></td> <td><i>Thymus xcitriodorus</i> (Pers.) Schreb.</td> </tr> <tr> <td><b><u>mastic thyme</u></b></td> <td><i>Thymus mastichina</i> L.</td> </tr> <tr> <td><b><u>sauce thyme</u></b></td> <td><i>Thymus zygis</i> L.</td> </tr> <tr> <td><b><u>Spanish thyme</u></b></td> <td><i>Lippiamicromera</i>Schau.</td> </tr> <tr> <td><b><u>Spanish thyme</u></b></td> <td><i>Thymus zygis</i> L.</td> </tr> <tr> <td><b><u>thyme</u></b></td> <td><i>Thymus</i> L.</td> </tr> <tr> <td><b><u>thyme oil</u></b></td> <td><i>Thymus zygis</i> L. *</td> </tr> </tbody> </table>	<b><u>Beckland thyme</u></b>	<i>Thymus serpyllum</i> L.	<b><u>caraway thyme</u></b>	<i>Thymus herba-barona</i> Loisel.	<b><u>cat thyme</u></b>	<i>Teucriummarum</i> L.	<b><u>conehead thyme</u></b>	<i>Thymus capitatus</i> (L.) Hoffmanns. & Link	<b><u>creeping thyme</u></b>	<i>Thymus serpyllum</i> L.	<b><u>false thyme</u></b>	<i>Lippiamicromera</i> Schau.	<b><u>garden thyme</u></b>	<i>Thymus vulgaris</i> L.	<b><u>Japanese thyme</u></b>	<i>Thymus quinquecostatus</i> Čelak.	<b><u>lemon thyme</u></b>	<i>Thymus xcitriodorus</i> (Pers.) Schreb.	<b><u>mastic thyme</u></b>	<i>Thymus mastichina</i> L.	<b><u>sauce thyme</u></b>	<i>Thymus zygis</i> L.	<b><u>Spanish thyme</u></b>	<i>Lippiamicromera</i> Schau.	<b><u>Spanish thyme</u></b>	<i>Thymus zygis</i> L.	<b><u>thyme</u></b>	<i>Thymus</i> L.	<b><u>thyme oil</u></b>	<i>Thymus zygis</i> L. *
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<sup>2</sup> The United States used the following references in drafting these comments.

- International Plant Name Index (<http://www.ipni.org/ipni/plantnamesearchpage.do>) accessed 8/22/2016.
- Bounatirou, S., S. Smiti, M.G. Miguel, L. Falleiro, M.N. Rejeb, M. Neffati, M.M. Costa, A.C. Figueiredo, J.G. Barroso, and L.G. Pedro (2007) Chemical Composition, antioxidant and antibacterial activities of the essential oils isolated from Tunisian *Thymus capitatus* Hoff. et Link., Food Chemistry 105:146-155

Para	Text	T	Comment
<u>7</u>	Dried thyme is the product prepared from leaves/ flowers of <i>Thymus spp.</i> processed in an appropriate manner, undergoing operations such as cleaning, drying, rubbing, milling and sifting.	<u>P</u>	<b>EDITORIAL</b> <b>Brazil</b> Dried thyme is the product prepared from leaves/ flowersm of <i>Thymus <del>spp</del>spp.</i> processed in an appropriate manner, undergoing operations such as cleaning, drying, rubbing, milling and sifting. Correct writing of "spp." (remove italics) - The correct inscription of the species acronym "spp." precludes the use of italics. The adoption of italics for spp. in taxonomy is considered a mistake.
<u>10</u>	a) Whole: intact.	<u>P</u>	<b>EDITORIAL</b> <b>Paraguay</b> a) <i>Whole: intact.</i> It is considered that the term does not need definition
<u>11</u>	b) Crushed/rubbed: processed in several degrees from coarse to fine.	<u>P</u>	<b>EDITORIAL</b> <b>Paraguay</b> b) <del>Crushed/rubbed:</del> : <b>Crushed:</b> processed in several degrees from coarse to fine; <b>in several</b> degrees from coarse to fine. To simplify the writing.
<u>12</u>	c) Ground/powder: processed in powder.	<u>P</u>	<b>EDITORIAL</b> <b>Paraguay:</b> c) <del>Ground/powder:</del> <b>Ground:</b> processed in powder
<u>20</u>		C	<b>USA</b> <b>Issue and Rationale for change:</b> This section does not explicitly prohibit the adulteration of thyme with plant material from which the essential oils have been extracted. Nor is there a prohibition from the addition of extracted oils or chemicals to "improve" the sensory character of the plant material. The United States recommends the following text be added at the end of the current text in the draft standard to address this matter. <b><u>"No valuable constituent has been in whole or in part omitted or abstracted from the dried thyme or any essential oil or chemical substituted wholly or in part. No substance shall be added or mixed into the plant material to increase its bulk or weight, or reduce its quality or strength, or make it appear better or of greater value than it is except as allowed under section 4.1 of this standard."</u></b>
<u>22</u>	Dried thyme shall be free from live insects and practically free from dead insects, insect fragments and rodent contamination visible to the naked eye (corrected, if necessary, for abnormal vision).	<u>P</u>	<b>TECHNICAL</b> <b>Ecuador</b> Dried thyme shall be free from live <del>insects and practically free from</del> <b>insects</b> , dead insects, insect fragments and rodent contamination visible to the naked eye (corrected, if necessary, for abnormal vision).
<u>22</u>	Dried thyme must be free of live insects and practically free of dead insects, insect fragments and rodent contamination visible to the naked eye (with glasses, for those who use them).	<u>C</u>	<b>TECHNICAL</b> <b>Paraguay</b> Clarification is requested, a the technical practically is considered permissive and subjective having in account that contamination mainly by rodents may present a significant risk
<u>24</u>		C	<b>USA</b> Table 1. Physical requirements for dried thyme <b>Issue and Rationale for change:</b> For consistency with industry practices, the United States recommends the inclusion of tolerances for Excreta Mammalian, mg/kg (max),

Para	Text	T	Comment
			2; and Excreta, other mg/Kg (max), 11. These levels would be consistent with the cleanliness standard published by the American Spice Trade Association (ASTA) and widely used internationally.
<u>30</u>	0.5	<u>P</u>	<i>TECHNICAL</i> <b>Ecuador</b> <del>0-5</del> <b>10</b> The parameters values are too low (0.5), regarding to the Ecuadorian Normative, specifically by: Extraneous vegetable material; and, Foreign matter content; suggesting specifically a value of 10 for both parameters.
		<u>C</u>	<i>TECHNICAL</i> <b>Mexico</b> For foreign matter the value should be 4% according to national regulations
		<u>P</u>	<i>TECHNICAL</i> <b>Mexico</b> <del>0-5</del> <b>4</b>
<u>33</u>	0.5	<u>P</u>	<i>TECHNICAL</i> <b>Ecuador</b> <del>0-5</del> <b>10</b> The parameters values are too low (0.5), regarding to the Ecuadorian Normative, specifically by: Extraneous vegetable material; and, Foreign matter content; suggesting specifically a value of 10 for both parameters.
		<u>C</u>	<i>TECHNICAL</i> <b>Mexico</b> For foreign matter the value should be 4% according to national regulations
		<u>P</u>	<i>TECHNICAL</i> <b>Mexico</b> <del>0-5</del> <b>4</b>
<u>34</u>	Mold visible, maximum %	<u>P</u>	<i>TECHNICAL</i> <b>Mexico</b> <del>Mold visible, maximum %</del>
<u>35</u>	1.0	<u>C</u>	<i>TECHNICAL</i> <b>Mexico</b> Mexico also proposes to eliminate the last two parameters because there is no practical way to measure them
		<u>P</u>	<b>Mexico</b> <i>TECHNICAL</i> <del>1-0</del>
<u>36</u>	<a href="#">a)</a> Insect damaged leaves/ flowers, maximum % mass fraction	<u>P</u>	<b>Mexico</b> <i>TECHNICAL</i> <del>a) Insect damaged leaves/ flowers, maximum % mass fraction</del>
<u>37</u>	1.0	<u>P</u>	<b>Mexico</b> <i>TECHNICAL</i> <del>1-0</del>

Para	Text	T	Comment
<u>44</u>	12.0	<u>C</u>	<i>EDITORIAL</i> <b>Mexico</b> Mexico proposes these values, according with the national regulations.
		<u>P</u>	<i>EDITORIAL</i> <b>Mexico</b> <del>12.09.0</del>
		<u>P</u>	<i>TECHNICAL</i> <b>Mexico</b> <del>12.0</del>
<u>46</u>	12.0	<u>P</u>	<i>TECHNICAL</i> <b>Mexico</b> <del>12.0</del> <b>11.0</b>
<u>48</u>	3.5	<u>C</u>	<i>EDITORIAL</i> <b>IOSTA</b> Suggest max 5%
		<u>P</u>	<i>EDITORIAL</i> <b>Mexico</b> <del>3.54.0</del>
<u>50</u>	1.0	<u>P</u>	<i>TECHNICAL</i> <b>Mexico</b> <del>1.0</del> <b>9</b>
<u>52</u>	A sample batch that does not meet one or more of the applicable quality requirements, as set out in Section 3.2 must be considered as "defective". (specially those based on the sample average must be considered defective)	<u>P</u>	<i>SUBSTANTIVE</i> <b>Paraguay</b> A sample batch that does not meet one or more of the applicable quality requirements, as set out in Section 3.2 must be considered as "defective". ". (specially those based on the sample average must be considered defective)
<u>54</u>	It is considered that a batch meets the applicable quality requirements specified in Section 3.2 when the number of "defectives", as defined in section 3.3 does not exceed the acceptance number of the appropriate sampling plan. For the factors assessed in a sample average, the batch shall be considered acceptable, if the average meets the specified tolerance and no individual sample is excessively out of tolerance.	<u>P</u>	<i>EDITORIAL</i> <b>Paraguay</b> It is considered that a batch meets the applicable quality requirements specified in Section 3.2 when the number of "defectives", as defined in section 3.3 does not exceed the acceptance number of the appropriate sampling plan. <del>For the factors assessed in a sample average, the batch shall be considered acceptable, if the average meets the specified tolerance and no individual sample is excessively out of tolerance.</del> It is proposed to eliminate the average evaluation as it could cause inclusion of lots with high percentages of defectives; also the sentence "excessively out of tolerance" would be very subjective.
<u>55</u>	<b>4 FOOD ADDITIVES</b>	<u>P</u>	<i>TECHNICAL</i> <b>Ecuador</b> <b>4-FOOD-ADDITIVES</b> Spices should be clean and free of foreign matter and substances that change the nature of the product (dyes, sweeteners, antioxidants, mineral oils, starch etc.).

Para	Text	T	Comment
<u>56</u>	4.1 Only the anticaking agents listed below are permitted for use in ground/powdered thyme.	<u>P</u>	<i>TECHNICAL</i> <b>Ecuador</b> <del>4.1 Only the anticaking agents listed below are permitted for use in ground/powdered thyme.</del> Spices should be clean and free of foreign matter and substances that change the nature of the product (dyes, sweeteners, antioxidants, mineral oils, starch etc.).
		<u>C</u>	<i>EDITORIAL</i> <b>IOSTA</b> while food additives such as anti-caking power are permitted, thyme and thyme powder are not prone to caking
<u>73</u>	6.1 It is recommended that the products covered by the provisions of this standard must be handled in accordance with the General Principles of Food Hygiene (CAC/RCP 1-1969), the <i>Code of Hygienic Practice for Spices and Dried Aromatic Herbs</i> (CAC/RCP 42-1995) and other relevant Codex texts such as codes of hygienic practice and codes of practice.	<u>P</u>	<b>TECHNICAL</b> <b>Paraguay</b> <del>6.1 It is recommended that</del> The products covered by the provisions of this standard must be prepared and handled in accordance with the General Principles of Food Hygiene (CAC/RCP 1-1969), the Code of Hygienic <b>Practice</b> for Spices and Dried Aromatic Herbs (CAC/RCP 42-1995) and other relevant Codex texts such as codes of hygienic practice and codes of practice.
<u>76</u>	Containers must be as practical as possible, without quality defect and must be compatible with an adequate declaration of the content.	<u>P</u>	<i>EDITORIAL</i> <b>Paraguay</b> Containers must be as practical as possible, without quality defect and must be compatible with an <del>adequate</del> a declaration of the content.
<u>90</u>	ISO 938:1980	<u>C</u>	<i>EDITORIAL</i> <b>IOSTA</b> ISO Method 939
<u>94</u>	Distillation	<u>C</u>	<i>EDITORIAL</i> <b>Egypt</b> Distillation and/or Gravimetry

**[1] DRAFT STANDARD FOR DRIED THYME****[2] (at Step 6 of the Procedure)****[3]1 SCOPE**

[4] This Standard applies to dried leaves/ flowers of thyme (*Thymus* spp.) of the *Lamiaceae* family offered for industrial food production as a condiment and for direct human consumption or for repackaging if required. [It does not apply to the product when indicated as being intended for further processing.]

**[5]2 DESCRIPTION****[6]2.1 Product Definition**

[7] Dried thyme is the product prepared from leaves/ flowers of *Thymus* spp. processed in an appropriate manner, undergoing operations such as cleaning, drying, rubbing, milling and sifting.

**[8]2.2 Styles**

[9] Dried thyme leaves/ flowers may be offered in one of the following styles:

- a) [10] Whole / intact.
- b) [11] Crushed/rubbed: processed into varying degrees ranging from a coarse to fine crush.
- c) [12] Ground/powdered: processed into powders.

**[13]2.3 Varietal Types**

[14] All wild species and varieties or cultivars and hybrids belonging to the genus *Thymus*, which are suitable for processing.

**[15]3 ESSENTIAL COMPOSITION AND QUALITY FACTORS****[16]3.1 Composition**

[17] Product as defined in Section 2.

**[18]3.2 Quality Factors****[19]3.2.1 Odour, flavour and colour**

[20] Dried thyme shall have a characteristic odour and flavour according to the chemical components of the volatile oil (such as thymol, carvacrol, and linalool), which can vary depending on geo-climatic factors/conditions. Dried thyme shall be free from any foreign odour or flavour and especially from mustiness. Dried thyme shall have a characteristic colour varying from green ash to brownish grey.

**[21]3.2.2 Infestation**

[22] Dried thyme shall be free from live insects and practically free from dead insects, insect fragments and rodent contamination visible to the naked eye (corrected, if necessary, for abnormal vision).

**[23]3.2.3 Physical Characteristics**

[24] Dried thyme shall comply with the physical requirements specified in Table 1, excluding ground/powdered style.

[25] Table 1. Physical requirements for dried thyme

[26] Parameter	[27] Requirement
[28] Extraneous vegetable material <sup>3</sup> , maximum % mass fraction	[30] 0.5
[31] Foreign matter <sup>4</sup> content, maximum % mass fraction	[33] 0.5
[34] Mold visible, maximum %	[35] 1.0
[36] Insect damaged leaves/ flowers, maximum % mass fraction	[37] 1.0

<sup>3</sup>[29] All vegetable matter from the specific plant other than the required part. The proportion of stalks which have dimensions exceeding 7 mm in length and 2 mm in diameter shall not be more than 5 % (m/m) (w/w) of total extraneous matter content.

<sup>4</sup>[32] Any visible and/or apparent matter or material not usually associated with the product.

**[38]3.2.4 Chemical Characteristics**

[39]Dried thyme shall comply with the chemical requirements specified in Table 2.

[40]Table 2. Chemical requirements for dried thyme

[41]Parameter	[42]Requirement
[43]Moisture, % mass fraction, maximum	[44]12.0
[45]Total ash, % mass fraction (dry basis), maximum	[46]12.0
[47]Acid-insoluble ash, % mass fraction (dry basis), maximum	[48]3.5
[49]Volatile oils, ml/100 g (dry basis), minimum	[50]1.0

**[51]3.3 Classification of “Defectives”**

[52]A lot sample that fails to meet one or more of the applicable quality requirements, as set out in Section 3.2 (except those based on sample averages), should be considered as a “defective”.

**[53]3.4 Lot Acceptance**

[54]A lot should be considered as meeting the applicable quality requirements referred to in Section 3.2 when the number of “defectives”, as defined in Section 3.3, does not exceed the acceptance number of the appropriate sampling plan. For factors evaluated on a sample average, a lot will be considered acceptable if the average meets the specified tolerance, and no individual sample is excessively out of tolerance.

**[55]4 FOOD ADDITIVES**

[56]4.1 Only the anticaking agents listed below are permitted for use in ground/powdered thyme.

[57]INS No.	[58]Name of the Food Additive	[59]Maximum Level
[60]460 (i)	[61]Microcrystalline cellulose	[62]GMP
[63]460 (ii)	[64]Powdered cellulose	[65]GMP
[66]551	[67]Silicon dioxide, amorphous	[68]GMP

**[69]5 CONTAMINANTS**

[70]5.1 The products covered by this Standard shall comply with the maximum levels of the *General Standard for Contaminants and Toxins in Food and Feed* (CODEX STAN 193-1995).

[71]5.2 The products covered by this Standard shall comply with the maximum residue limits for pesticides established by the Codex Alimentarius Commission.

**[72]6 FOOD HYGIENE**

[73]6.1 It is recommended that the products covered by the provisions of this Standard be prepared and handled in accordance with the appropriate sections of the *General Principles of Food Hygiene* (CAC/RCP 1-1969), the *Code of Hygienic Practice for Spices and Dried Aromatic Herbs* (CAC/RCP 42-1995) and other relevant Codex texts such as codes of hygienic practice and codes of practice.

[74]6.2 The products should comply with any microbiological criteria established in accordance with the *Principles and Guidelines for the Establishment and Application of Microbiological Criteria related to Foods* (CAC/GL 21-1997).

**[75]7 WEIGHTS AND MEASURES**

[76]Containers shall be as full as practicable without impairment of quality and shall be consistent with a proper declaration of contents for the product.

**[77]8 LABELLING**

[78]8.1 The products covered by the provisions of this Standard shall be labelled in accordance with the *General Standard for the Labelling of Pre-packaged Foods* (CODEX STAN 1-1985). In addition, the following specific provisions apply:

**[79]8.2 Name of the Product**

[80]8.2.1 The name of the product shall be "dried thyme".

[81]8.2.2 The name of the product may include an indication of the species, varietal types and the style as described in Section 2.2. In case of products consisting of blends of different *Thymus* species, the name of the product may be followed by the *Thymus* species in order of descending quantity.

**[82]8.3 Labelling of Non-Retail Containers**

[83] Information for non-retail containers shall be given either on the container or in accompanying documents, except that the name of the product, lot identification, and the name and address of the manufacturer, packer, distributor or importer, as well as storage instructions, shall appear on the container. However, lot identification, and the name and address of the manufacturer, packer, distributor or importer may be replaced by an identification mark, provided that such a mark is clearly identifiable with the accompanying documents.

**[84]9. METHODS OF ANALYSIS AND SAMPLING****[85]9.1 Methods of Analysis**

[86]Provision	[87]Method	[88]Principle
[89]Moisture	[90]ISO 938:1980 [91]Alternative: [92]AOAC 2001.12 [93]ASTA 2.0	[94]Distillation
[95]Total ash	[96]ISO 928:1997 [97]Alternative: [98]AOAC 950.49 [99]ASTA 3.0	[100]Gravimetry
[101]Acid-insoluble ash	[102]ISO 930:1997 [103]Alternative: [104]ASTA 4.0	[105]Gravimetry
[106]Volatile oils	[107]ISO 6571:2008 [108]Alternative: [109]AOAC 962.17 [110]ASTA 5.0	[111]Distillation
[112]Extraneous vegetable material	[113]ISO 927:2009 [114]Alternative: [115]ASTA 14.1	[116]Visual examination
[117]Foreign matter	[118]ISO 927:2009	[119]Visual examination
[120]Insect damage	[121]Method V-8 Spices, Condiments, Flavors and Crude Drugs [122](Macroanalytical Procedure Manual, [123]FDA Technical Buletin Number 5)	[124]Visual examination
[125]Mold damage	[126]Method V-8 Spices, Condiments, Flavors and Crude Drugs [127](Macroanalytical Procedure Manual, [128]FDA Technical Bulletin Number 5)	[129]Visual examination

**[130]9.2 Sampling Plan**

[131][To be developed]