DRAFT EAST AFRICAN STANDARD

Bee propolis — Specification

EAST AFRICAN COMMUNITY

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Foreword

Development of the East African Standards has been necessitated by the need for harmonizing requirements governing quality of products and services in the East African Community. It is envisaged that through harmonized standardization, trade barriers that are encountered when goods and services are exchanged within the Community will be removed.

The Community has established an East African Standards Committee (EASC) mandated to develop and issue East African Standards (EAS). The Committee is composed of representatives of the National Standards Bodies in Partner States, together with the representatives from the public and private sector organizations in the community.

East African Standards are developed through Technical Committees that are representative of key stakeholders including government, academia, consumer groups, private sector and other interested parties. Draft East African Standards are circulated to stakeholders through the National Standards Bodies in the Partner States. The comments received are discussed and incorporated before finalization of standards, in accordance with the Principles and procedures for development of East African Standards.

East African Standards are subject to review, to keep pace with technological advances. Users of the East African Standards are therefore expected to ensure that they always have the latest versions of the standards they are implementing.

The committee responsible for this document is EASC/TC 011, Apiary and apiary products. Attention is drawn to the possibility that some of the elements of this document may be subject of patent rights. EAC shall not be held responsible for identifying any or all such patent rights.
Bee propolis — Specification

1 Scope

This Draft East African Standard specifies the requirements, sampling and test methods for bee propolis.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

AOAC Official Method 999.11 Determination of Lead, Cadmium, Copper, Iron, and Zinc in Foods, Atomic Absorption Spectrophotometry after Dry Ashing

CAC/GL 50, General guidelines on sampling

EAS 12, Potable water — Specification

EAS 38, Labelling of pre-packaged foods — General requirements

EAS 39, Code of practice for hygiene in the food and drink manufacturing industry

ISO 1666, Starch — Determination of moisture content — Oven-drying method

EAS 804, Claims on food — General requirements

EAS 805, Use of nutrition and health claims — Requirements

ISO 5516, Fruits, vegetables and derived products — Decomposition of organic matter prior to analysis — Ashing method

ISO 5809, Starches and derived products — Determination of sulphated ash

ISO 16212, Cosmetics — Microbiology — Enumeration of yeast and mould

ISO 21150, Cosmetics — Microbiology — Detection of Escherichia coli

ISO 22718, Cosmetics — Microbiology — Detection of Staphylococcus aureus

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at http://www.iso.org/obp
propolis
bee glue or resinous mixture that bees produce by mixing bee secretions and beeswax with exudate gathered from tree buds, sap flows, or other botanical sources

4 Requirements

4.1 General requirements

Bee propolis shall;

a) have characteristic appearance, colour, taste, odour and flavour depending on origin;

b) be pure and unadulterated;

c) be lipophilic in nature, rigid, fragile and brittle material when cold; but when temperature rises, it becomes soft, pasty, gummy and adhesive property and be sticky;

d) be soluble in ether, sparingly soluble in alcohol and insoluble in water; and

e) be processed using clean equipment and the water used in processing shall be potable water in accordance with EAS 12.

4.2 Specific requirements

Bee propolis shall also comply with the requirements given in Table 1 when tested in accordance with the test methods prescribed therein.

<table>
<thead>
<tr>
<th>S/N</th>
<th>Characteristic</th>
<th>Requirement</th>
<th>Test method</th>
</tr>
</thead>
<tbody>
<tr>
<td>i)</td>
<td>Moisture content, %, max.</td>
<td>6.0</td>
<td>ISO 1666</td>
</tr>
<tr>
<td>ii)</td>
<td>Total ash, %, max.</td>
<td>10.0</td>
<td>ISO 5809</td>
</tr>
<tr>
<td>iii)</td>
<td>Wax, %, max.</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>iv)</td>
<td>Resins, %, max.</td>
<td>50</td>
<td></td>
</tr>
</tbody>
</table>

5 Contaminants

5.1 Heavy metal contaminants

Bee propolis shall be free from heavy metals in amounts which may represent a hazard to human health and shall conform to the limits specified in Table 2 when tested in accordance with the test methods prescribed therein.
Table 2 — Requirements for heavy metal contaminants

<table>
<thead>
<tr>
<th>S/N</th>
<th>Metal</th>
<th>Limit (ppm, max.)</th>
<th>Test method</th>
</tr>
</thead>
<tbody>
<tr>
<td>i)</td>
<td>Arsenic (As)</td>
<td>0.5</td>
<td>ISO 5516 &amp; AOAC 999.11</td>
</tr>
<tr>
<td>ii)</td>
<td>Lead (Pb)</td>
<td>1.0</td>
<td>ISO 5516 &amp; AOAC 999.11</td>
</tr>
<tr>
<td>iii)</td>
<td>Mercury (Hg)</td>
<td>0.05</td>
<td>ISO 5516 &amp; AOAC 999.11</td>
</tr>
<tr>
<td>iv)</td>
<td>Cadmium (Cd)</td>
<td>0.2</td>
<td>ISO 5516 &amp; AOAC 999.11</td>
</tr>
</tbody>
</table>

5.2 Residues of pesticides and veterinary drugs

Bee propolis shall comply with pesticides and veterinary drugs maximum residue limits for the product established by the Codex Alimentarius Commission.

6 Hygiene

Bee propolis shall be processed and handled in hygienic manner in accordance with the EAS 39 and shall comply with the microbiological limits stipulated in Table 3 when tested in accordance with test methods specified therein.

Table 3 — Microbiology requirements for bee propolis

<table>
<thead>
<tr>
<th>S/N</th>
<th>Parameter</th>
<th>Limit</th>
<th>Test method</th>
</tr>
</thead>
<tbody>
<tr>
<td>i)</td>
<td>Yeast/mould, cfu/g, max.</td>
<td>10</td>
<td>ISO 16212</td>
</tr>
<tr>
<td>ii)</td>
<td>E. coli, cfu/g</td>
<td>Absent</td>
<td>ISO 21150</td>
</tr>
<tr>
<td>iii)</td>
<td>Staphylococcus, cfu/g</td>
<td>Absent</td>
<td>ISO 22718</td>
</tr>
</tbody>
</table>

7 Packaging

Bee propolis shall be packaged in a food grade material that protects the integrity and safety of the product.

8 Weights and measures

The volume and fill of the container shall comply with weights and measures regulations in the respective partner state.

9 Labelling

In addition to the labelling requirements given in EAS 38, the package shall be legibly and indelibly marked with the following information:

a) name of the product as “Bee propolis”;

b) name, location and physical address of the processor/packer;

c) country of origin;
d) date of packaging;

e) best before;

f) instructions for storage;

g) net content in SI unit; and

h) Batch/Lot number

10 Nutritional and health claims

Any nutritional and health claims associated with this product shall be in accordance with EAS 805 and shall follow nutritional labelling concepts in accordance with EAS 804.

11 Sampling

Sampling of bee propolis shall be done in accordance with CAC/GL 50.