

**1 Foreword**

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3 The Philippine National Standard (PNS) for Baby corn – Grading and classification is a  
4 modified adoption of the CODEX STAN 188-1993 Standard for Baby Corn. With the  
5 initiative of the Bureau of Agriculture and Fisheries Standards (BAFS), a Technical  
6 Working Group (TWG) for the adoption of the Standard was created and authorized  
7 under Special Order No. 604 Series of 2017. The TWG was composed of the following  
8 agencies and institutions: National Food Authority (NFA), National Food Authority –  
9 Food Development Center (NFA-FDC), Bureau of Animal Industry (BAI), Food and  
10 Nutrition Research Institute (FNRI), Philippine Center for Postharvest Development and  
11 Mechanization (PHilMech), University of the Philippines Los Baños (UPLB), and  
12 Department of Agriculture (DA) – DA Corn Program. This Standard intends to provide  
13 guidance in the regulation and trade and ensure consistent quality and safety of baby  
14 corn.

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16 In this Standard, modifications due to national legal requirements and the particular  
17 needs of the Philippine industry have been made. These technical deviations have been  
18 incorporated in the provisions of the Standard. Some provisions of the Standard were  
19 also adopted from the ASEAN Standard for Baby Corn (ASEAN Stan 52:2017).

**1 Definition of produce**

This Standard applies to the cobs, without the silk and husk, of commercial varieties of baby corn (corn inflorescence) grown from *Zea mays* L, of the *Gramineae* family to be supplied fresh to the consumer, after preparation and packaging. Baby corn for industrial processing is excluded.

**2 Provisions concerning quality****2.1 Minimum requirements**

In all classes, subject to the special provisions for each class and the tolerances allowed, the cobs of baby corn must be:

- whole;
- sound, produce affected by rotting or deterioration such as to make it unfit for consumption is excluded;
- clean, practically free of any visible foreign matter;
- free of any foreign smell and/or taste;
- fresh in appearance;
- practically free of silk;
- practically free of pests and damage caused by them affecting the general appearance of the produce;
- practically free from mechanical and/or physiological damage such as low and/or high temperature; and
- practically free of surface moisture excluding condensation.

The cut that is made on the base of the cobs should be clean and well defined. A slight discoloration of the cut surface due to storage is acceptable.

**2.1.1** The baby corn must have been harvested and have reached an appropriate degree of development in accordance with criteria proper to the variety and the area in which they are grown. The development and condition of the baby corn must be such as to enable it:

- to withstand transport and handling; and
- to arrive in satisfactory condition at the place of destination.

**2.2 Classification**

The cobs of baby corn are classified in three classes defined below:

**2.2.1 "Extra" class**

The cobs of baby corn in this class must be well cut and trimmed, free of husk, stalk and silk, intact, and of superior quality. They must be characteristic of the variety and/or commercial type. They must be free of defects, with the exception of very slight superficial

66 defects, provided these do not affect the general appearance of the produce, the quality,  
67 the keeping quality, and presentation in the package.

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### 69 **2.2.2 Class I**

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71 The cobs of baby corn in this class must be well cut and trimmed, free of husk and stalk,  
72 and of good quality. They must be characteristic of the variety and/or commercial type.  
73 The following slight defects, however, may be allowed, provided these do not affect the  
74 general appearance of the produce, the quality, the keeping quality, and presentation in  
75 the package:

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- 77 - slight defects in shape, color, and texture;
- 78 - slight defects in regular arrangement of undeveloped kernels (ovules);
- 79 - slight defects on the surface due to bruising, scratches, or other mechanical  
80 damage. The total area affected shall not exceed 5% per cob;
- 81 - silk attached to and/or broken from the cob shall be minimal without affecting  
82 the appearance.

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### 84 **2.2.3 Class II**

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86 This class includes cobs of baby corn which do not qualify for inclusion in the higher  
87 classes, but satisfy the minimum requirements specified in Section 2.1 above. The  
88 following defects, however, may be allowed, provided the cobs of baby corn retain their  
89 essential characteristics as regards the quality, the keeping quality, and presentation:

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- 91 - defects in shape, color, and texture;
- 92 - defects in regular arrangement of undeveloped kernels (ovules);
- 93 - defects on the surface due to bruising, scratches, or other mechanical damage.  
94 The total area affected shall not exceed 10% per cob;
- 95 - silk attached to and/or broken from the cob shall be minimal without affecting  
96 the appearance.

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## 98 **3 Provisions concerning sizing**

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100 Size is determined by the length of the cob of baby corn, in accordance with the following  
101 table:

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Size code	Length (in centimetres)
1	> 9.0 - 12.0
2	> 7.0 - 9.0
3	4.0 - 7.0

103

104 For all sizes, the minimum width should not be less than 1.0 cm and the maximum width  
105 not more than 2.0 cm.

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107 **4 Provisions concerning tolerances**

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109 Tolerances in respect of quality and size shall be allowed in each package for produce not  
110 satisfying the requirements of the class indicated.

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112 **4.1 Quality tolerances**

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114 **4.1.1 "Extra" Class**

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116 Five percent by number or weight of cobs of baby corn not satisfying the requirements of  
117 the class, but meeting those of Class I or, exceptionally, coming within the tolerances of  
118 that class.

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120 **4.1.2 Class I**

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122 Ten percent by number or weight of cobs of baby corn not satisfying the requirements of  
123 the class, but meeting those of Class II or, exceptionally, coming within the tolerances of  
124 that class.

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126 In the case of cobs of baby corn with incompletely removed husk and stalk, only 5% by  
127 number or weight of 0.5 cm long of the husk and stalk is allowed.

128

129 **4.1.3 Class II**

130

131 Ten percent by number or weight of cobs of baby corn satisfying neither the requirements  
132 of the class nor the minimum requirements, with the exception of produce affected by  
133 rotting or any other deterioration rendering it unfit for consumption.

134

135 In the case of cobs of baby corn with incompletely removed husk and stalk, only 5% by  
136 number or weight of 0.5 cm long of the husk and stalk is allowed.

137

138 **4.2 Size tolerances**

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140 For "Extra" Class, 5%; and for Class I or Class II 10%; by number or weight of cobs of baby  
141 corn not satisfying the requirements as regards sizing, but falling within the class  
142 immediately above or below those indicated in Section 3.

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144 **5 Provisions concerning presentation**

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146 **5.1 Uniformity**

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148 The contents of each package (or lot for produce presented in bulk) must be uniform and  
149 contain only cobs of baby corn of the same origin, quality, and size. The visible part of the  
150 contents of the package (or lot for produce presented in bulk) must be representative of  
151 the entire contents.

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**5.2 Packaging**

The cobs of baby corn must be packed in such a way as to protect the produce properly. The primary packaging materials to be used shall be new<sup>1</sup>, clean, and of a quality such as to avoid causing any external or internal damage to the produce. The use of materials, particularly of paper or stamps bearing trade specifications, is allowed, provided the printing or labelling has been done with non-toxic ink or glue.

The cobs of baby corn shall be packed in each container in compliance with the Recommended International Code of Practice for Packaging and Transport of Fresh Fruits and Vegetables (CAC/RCP 44-1995) or its equivalent Philippine National Standard.

**5.2.1 Description of containers**

The containers shall meet the quality, hygiene, ventilation and resistance characteristics to ensure suitable handling, shipping, and preserving of the cobs of baby corn. Packages (or lot for produce presented in bulk) must be free of foreign matter and smell.

**6 Marking or labelling****6.1 Consumer packages**

In addition to the requirements of the Codex General Standard for the Labelling of Prepackaged Foods (CODEX STAN 1-1985) or its equivalent Philippine National Standard (PNS), the following specific provisions apply:

**6.1.1 Nature of produce**

If the produce is not visible from the outside, each package shall be labelled as to the name of the produce and may be labelled as to the name of the variety (optional).

**6.2 Non-retail containers**

Each package must bear the following particulars, in letters grouped on the same side, legibly and indelibly marked, and visible from the outside, or in the documents accompanying the shipment. For produce transported in bulk, these particulars must appear on a document accompanying the goods.

**6.2.1 Identification**

Name and address of exporter, packer and/or dispatcher. Identification code (optional)<sup>2</sup>.

<sup>1</sup> For the purposes of this Standard, this includes recycled material of food-grade quality.

<sup>2</sup> The national legislation of a number of countries requires the explicit declaration of the name and address. However, in the case where a code mark is used, the reference “packer and/or dispatcher (or equivalent abbreviations)” has to be indicated in close connection with the code mark.

199 **6.2.2 Nature of produce**

200  
201 Name of the produce if the contents are not visible from the outside. Name of the variety  
202 or commercial type (optional).

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204 **6.2.3 Origin of produce**

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206 Country of origin and, optionally, district where grown or national, regional or local place  
207 name.

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209 **6.2.4 Commercial identification**

- 210  
211 - Class;  
212 - Size (size code);  
213 - Net weight (optional);  
214 - Produce name;  
215 - Variety name (optional); and  
216 - Number of units (optional).

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218 **6.2.5 Official inspection mark (optional)**

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220 **7 Contaminants**

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222 **7.1** The produce covered by this Standard shall comply with the maximum levels of  
223 the Codex General Standard for Contaminants and Toxins in Food and Feed (CODEX STAN  
224 193-1995) or its equivalent Philippine National Standard (PNS).

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226 **7.2** The produce covered by this Standard shall comply with the maximum residue  
227 limits for pesticides established by the Codex Alimentarius Commission.

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229 **8 Hygiene**

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231 **8.1** It is recommended that the produce covered by the provisions of this Standard be  
232 prepared and handled in accordance with the appropriate sections of the Recommended  
233 International Code of Practice – General Principles of Food Hygiene (CAC/RCP 1-1969),  
234 Code of Hygienic Practice for Fresh Fruits and Vegetables (CAC/RCP 53-2003), and other  
235 relevant Codex texts and PNS such as Codes of Hygienic Practice and Codes of Practice.

236  
237 **8.2** The produce should comply with any microbiological criteria established in  
238 accordance with the Principles for the Establishment and Application of Microbiological  
239 Criteria for Foods (CAC/GL 21-1997).