

DEPARTMENT OF AGRICULTURE, FORESTRY AND FISHERIES

STD. No. G-10

AGRICULTURAL PRODUCT STANDARDS ACT, 1990 (ACT No. 119 OF 1990)

STANDARDS AND REQUIREMENTS REGARDING CONTROL OF THE EXPORT
OF LESSER KNOWN TYPES OF MAIZE

The Executive Officer: Agricultural Product Standards has stipulated under section 4(3)(a)(ii) of the Agricultural Product Standards Act, 1990 (Act No. 119 of 1990), the standards regarding the quality of lesser known types of maize and the requirements regarding the packing, marking and labelling thereof.

STD No. G-10

STANDARDS AND REQUIREMENTS REGARDING CONTROL OF THE
EXPORT OF LESSER KNOWN TYPES OF MAIZE AS STIPULATED BY
GOVERNMENT NOTICE No. R. 1983 OF 23 AUGUST 1991

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Definitions

1. In these standards and requirements any word or expression to which a meaning has been assigned in the Act, shall have that meaning, unless the context otherwise institutes, and -

“Arthropoda” means any stage in the life cycle of an invertebrate member of the Animal Kingdom that is bilaterally symmetrical with a segment body, with jointed limbs that are paired and a chitinous external skeleton;

“bag” means a bag manufactured from -

- (a) jute or phormium or mixture of jute and phormium;
- (b) polypropylene that complies with SANS 1246; 2012
- (c) paper; or
- (d) Paper with plastic inner linings.

“bulk container” means a grain truck, any vehicle or container in which bulk of lesser known types of maize is stored or transported;

“broken kernel” means a kernel of which a portion is broken off;

“chemical residues” means residues of agricultural remedies which in terms of the Fertilizers, Farm Feeds, Agricultural Remedies and Stock Remedies Act, 1947 (Act No. 36 of 1947), are permissible for the treatment of pests and diseases which do not exceed maximum permissible residue limits which have been prescribed in terms of the Foodstuffs, Cosmetics and Disinfectants Act, 1972 (Act No.54 of 1972);

“consignment” means -

- (a) a quantity of lesser known types of maize of the same class, which belongs to the same owner, delivered at any one time under cover of the same consignment note, delivery note or receipt note, or delivered by the same vehicle or bulk container, or loaded from the same bin of a grain elevator into a ship's hold or railway truck; or
- (b) in the case where a quantity referred to in paragraph (a), is subdivided into different grades, each such quantity of each of the different grades;

“container” means a bag or a bulk container;

“coffee stained maize kernels” means maize kernels with a shiny brown colour that occurs anywhere on the pericarp of the maize kernel;

“**dangerous object**” means any object or part thereof which, when occurring in lesser known types of maize, may be dangerous in the handling or consumption of that lesser known types of maize;

“**discoloured maize kernels**” means maize kernels that are as a result of environmental conditions more than 25% discoloured on both sides of the kernel, excluding coffee stained maize kernels, oxidation stained maize kernels and pinked maize kernels;

“**defective maize**” means lesser known types of maize kernels -

which are shrivelled, obviously immature frost-damaged, heat damaged water damaged or mouldy.

- (a) that are discoloured by external factors such as water, sun, coffee stained, pinked maize kernels and oxidation stained kernels : Provided that discoloration on both sides of the maize kernel limited to less than a quarter from the bottom tip of the maize kernel shall not be considered as defective.
- (b) that are discoloured by external factors such as water and sun: Provided that discoloration on both sides of the maize kernel limited to less than a quarter from the bottom tip of the maize kernel shall not be considered as defective; oxidation stained maize kernels; coffee stained maize kernels; and pinked maize kernels shall not be considered as defective;
- (c) which have sprouted, including kernels of which the growing point (plumule) in the germ is visibly discoloured;
- (d) with cavities in the germ or endosperm caused by insects or rodents;
- (e) which are visibly contaminated by smut, soil, smoke, coal dust , or any other means;
- (f) which are clearly of inferior quality; and
- (g) which in the case of popcorn, are in any way broken or split;

“**expansion ratio**” means the total popped volume (ml) expressed as a ratio of the mass (g) of the working samples;

“**foreign matter**” means all materials other than lesser known types of maize kernels, glass, stone, coal, dung or metal: Provided that lesser known types of maize kernels of other types than Zea mays amlyacea; Zea mays ceratina; Zea mays evert and Zea mays saccharata shall be regarded as defective maize kernels;

“**insect**” means any insect which is injurious to stored grain, irrespective of the stage of development of the insect;

“**insect damaged kernel**” means a kernel that is in any way damaged by a pest insect;

“**inspector**” means the Executive Officer or an officer under his control, or an Assignee or suitably qualified employee of an Assignee;

“**lesser known types of maize**” means the following types of maize which are not intended for seed purposes -

- (a) “bread maize” the threshed seed of the plant Zea mays amlyacea;
- (b) “popcorn” the threshed seed of the plant Zea mays everta;
- (c) “waxy maize” a type of maize which contains a high percentage of molecular branched amylopectin starch fraction in the endosperm and which normally originates from the plant Zea mays ceratina; and
- (d) “sweetcorn” the threshed seed of the plant Zea mays saccharata: Provided that white and yellow maize kernels of the plants of (Zea mays indurate) and (Zea mays indentata) are for the purpose of these standards and requirements not included;

“**maize of another class**” means maize which, with the exception of colour does not comply with the form, size and other requirements of the classes concerned in this standard;

“**mouldy**” means kernels or pieces of kernels that-

- (a) are visibly infected by fungi and are characterised by black, blue, green, yellow or white fungi growth anywhere on the kernel, or are characterised by fungi growth underneath the bran layer of the kernel;
- (b) are infected by ear-rot and are characterised by red, pink or brown discolorations. The kernels are partially to completely infected;

“other coloured maize”, in relation to -

- (a) white maize, means maize kernels or pieces of maize kernels of which the endosperm as a result of genetic (characteristics) composition have another colour than white, excluding pinked maize kernels; and
- (b) yellow maize, means maize kernels or pieces of maize kernels of which the endosperm as a result of genetic (characteristics) composition have another colour than yellow;

“oxidation stained maize kernels” means maize kernels with a shiny light brown colour that are discoloured from the crown and not from the tip cap;

“pinked maize kernels” means kernels and pieces of kernels of white maize of which the pericarp or part thereof is shaded red or pink in colour;

“poisonous seeds” means seeds or part of seeds of a plant species that may in terms of the Foodstuffs, Cosmetics and Disinfectants Act, 1972 (Act No.54 of 1972) represent a hazard to human or animal health when consumed, including seeds of *Argemone mexicana L.*, *Convolvulus spp.*, *Crotalaria spp.*, *Datura spp.*, *Ipomoea spp.*, *Lolium temulentum*, *Ricinus communis* or *Xanthium spp.*;

“shrivelled or obviously immature maize kernels” means maize kernels with a thin and shrunken appearance;

“sprouted maize kernels” means maize kernels which have sprouted so far that developing roots and/or sprouts are clearly visible, or the shoot (plumule) in the germ is visibly discoloured;

“the 6.35 mm round hole sieve” means a sieve-

- (a) with a flat metal sheet of 1.0mm thickness perforated with round holes of 6.35mm (± 0.05 mm) in diameter that are arranged with the centres of the holes at the points of intersection of an equilateral triangular grid with a pitch of 8mm;
- (b) of which the upper surface of the bottom is smooth;
- (c) the frame of which is at least 40mm high;
- (d) with the inner width of at least 200mm and the inner length of at least 300mm, or, in the case of a circular sieve, the inner diameter of at least 278mm;
- (e) with a minimum area of 600cm² and a maximum of 750cm²; and

- (f) that fits onto a tray with a solid bottom and must be at least 20mm above the bottom of the tray.

“the Act” means the Agricultural Product Standards Act, 1990 (Act No. 119 of 1990; and

“water damaged maize kernels” means maize kernels with a light yellow shine from the tip cap in a band around the maize kernel.

Scope

2. These standards and requirements shall relate to lesser known types of maize in respect of which an approval for the export thereof is required in terms of section 4 of the Act.

Requirements for approval

3. (1) An approval referred to in section 4 of the Act may be issued in respect of a consignment of lesser known types of maize if -
- (a) the lesser known types of maize has been classified in accordance with the classes as set out in item 4;
 - (b) the lesser known types of maize has been graded in accordance with the grades set out in item 5;
 - (c) the lesser known types of maize complies with the standards for grades as set out in item 6;
 - (d) the containers in which the lesser known types of maize are packed, where applicable, comply with the requirements set out in item 7;
 - (e) the lesser known types of maize is packed in accordance with the packing requirements set out in item 8;
 - (f) the containers concerned are marked in accordance with the marking requirements set out in item 9;
 - (g) the consignment concerned has been inspected in accordance with the methods set out in item 11;
 - (h) the consignment concerned has been presented for inspection in accordance with the requirements of the Regulations regarding Control of the Export of Lesser Known Types of Maize; and

- (i) an inspector has, after an inspection in terms of the said regulations, found that the provisions of these standards and requirements have been complied with in respect of the consignment concerned.
- (2) The Executive Officer may deviate from the stipulated standards and requirements and issue the approval in respect of a quantity of a produce that -
 - (a) is to be exported as an experiment or under such other special circumstances as may be approved by the Executive Officer; and
 - (b) complies with the requirements for such produce in force in the country to which it is to be exported.

QUALITY STANDARDS

Classification requirements

4. There are three classes of lesser known types of maize intended for export namely:
- (a) Waxy maize;
 - (b) Popcorn; and
 - (c) Unspecified maize.

Grades for lesser known types of maize

5. The grades for the various classes of lesser known types of maize intended for export are as follows:
- (a) Waxy maize - Grade PM1 and Grade PM2;
 - (b) Popcorn - Grade Premium, Grade P1 and Grade P2;
 - (c) Unspecified maize - Grade U1 and Grade U2.

Standards for classes and grades

6. (1) Subject to the allowable deviations prescribed in subitem (3), lesser known types of maize shall -
- (a) be free from a musty or other undesired odour;
 - (b) be free from substances which may render it unfit for human or animal consumption or for processing into or utilisation therefore as Food or Feed;
 - (c) have a moisture content not exceeding 14 per cent;
 - (d) be free from insects irrespective whether such insects occur on or among the maize, in or on the containers or bulk maize in a truck;
 - (e) be practically free from foreign matter;
 - (f) be practically free from defective maize kernels;
 - (j) be practically free from other coloured lesser known types of maize kernels;

- (h) be practically free from lesser known types of maize of another class but may be irregular in shape or size;
- (i) contain not more poisonous seeds than permitted in terms of the Foodstuffs, Cosmetics and Disinfectants Act, 1972 (Act No. 54 of 1972);
- (j) be free from glass, metal, coal, stones and dung;
- (k) not exceed the maximum percentage / m/m deviations as set out in the Table for each grade;
- (l) contain no chemical residues which exceed the prescribed maximum residue limit: Provided that -
 - (i) if the prescribed maximum residue limit of an importing country is lower than is permissible in terms of the , Foodstuffs, Cosmetics and Disinfectants Act, 1972 (Act No.54 of 1972) the prescribed maximum residue limit of the importing country shall be complied with; and
 - (ii) the Executive Officer may grant permission for lesser known types of maize with a higher residue limit to be exported to countries where this higher residue limit is permissible: Provided that the export documents are endorsed accordingly with the name of the importing country;
- (m) contain not more than 10 microgram per kilogram aflatoxin of which not more than 5 microgram per kilogram may be aflatoxin B1: Provided that-
 - (i) if the prescribed maximum aflatoxin limit of an importing country is lower than is permissible, the prescribed maximum aflatoxin limit of the importing country shall be complied with;
 - (ii) the Executive Officer may grant permission for lesser known types of maize with higher maximum aflatoxin content to be exported to countries where this higher aflatoxin limit is permissible: Provided that the export documents are accordingly endorsed with the name of the importing country; and
 - (iii) an inspector shall verify compliance to the levels of aflatoxin by sampling and submitting samples for analysis of only certain consignments according to a risk-based plan.

- (n) may comply with the requirements for declared plant injurious organisms of phytosanitary importance as determined by the Director of the Directorate: Plant Health.

(2) All grades of the following classes shall comply with the additional requirements:

- (a) Waxy maize shall -
 - (i) have a dull chalky appearance;
 - (ii) contain a soft endosperm; and
 - (iii) Show a brown discoloration when the exposed endosperm is dipped in a 0, 1 per cent solution of iodine: Provided that if it does not discolour brown such maize shall be deemed to be maize of another class.
- (b) All grades of popcorn -
 - (i) may contain not more than 0, 3% (m/m) foreign matter in the case of Premium Grade and Grade P1 and not more than 0, 5% (m/m) foreign matter in the case of Grade P2;
 - (ii) shall be of such a quality that an expansion ratio (ml/g) of at least 39 ml/g, 36 ml/g and 30 ml/g is obtained in the case of Premium Grade, Grade P1 and Grade P2 respectively;
 - (iii) may contain not more than 0,5% (m/m), 0,7% (m/m) and 0,9% (m/m) insect damaged kernels in the case of Premium Grade, Grade P1 and Grade P2 respectively;
 - (vi) may contain not more than 1% (m/m), 1, 5% (m/m) and 2, 0% (m/m) broken kernels in the case of Premium Grade, Grade P1 and Grade P2 respectively; and

(3) Subject to the provisions of subitems (1 and 2) an exporter may request an inspector to certify, following the inspection, as correct the specifications on the product specification sheet accompanying the consignment, with regard to moisture content, foreign matter, insect damaged kernels, broken kernels, expansion ratio (ml/g), kernel count per 10 g, popping percentage and aflatoxin levels, provided that determination of popping percentage and aflatoxin levels will not be compulsory.

(4) The maximum percentage permissible deviations from the standards as set out in subitems (1) and (2) in respect of the various grades shall be as follows:

Nature of defect	Maximum percentage(%) permissible deviations (m/m)						
	Class and Grade						
	Waxy maize		Popcorn			Unspecified maize	
	PM1	PM2	Premium	P1	P2	U1	U2
(a) Lesser known types of maize kernels of another colour	3	5	2	3	5	3	5
(b) Lesser known types of maize kernels of another class	3	3	2	3	3	3	3
(c) Defective Lesser known types of maize kernels above and below the 6.35 mm sieve(excluding Popcorn)	7	13	-	-	-	7	13
(d) Defective Lesser known types maize kernels (in case of Popcorn)							
(i) Broken kernels	-	-	0,1	1.5	2	-	-
(ii) Insect damage	-	-	0,5	0,7	0,9	-	-
(e) Foreign matter	0,3	0,5	0,3	0,3	0,5	0,3	0,5
(f) Deviations in paragraphs (a), (b), (c), (d) and (e) collectively: Provided that such deviations are individually within the specified limits	8	16	2	3	5	8	16

REQUIREMENTS FOR CONTAINERS

Particulars

7. (1) A container, excluding a ship's hold, railway truck or road truck and storage facility, which contain lesser known types of maize intended for export shall be suitable, intact (excluding holes made by a grain probe in the case of bags), clean, dry and odourless.

(2) Subject to the provisions of subitem (1) a bag which contain lesser known types of maize intended for export shall -

- (a) be new;
- (b) be strong enough for the conveyance of the maximum mass of lesser known types of maize that can be accommodated in the bag; and
- (c) not be stained by any colouring matter or be impregnated by any liquid capable of imparting stains, excluding normal discolouration due to exposure to the sun.

(3) A ship's hold into which lesser known types of maize intended for export is released, shall -

- (a) visibly be free from insects;
- (b) be reasonably free from pieces of grain or any other material that may harbour insects; and

Provided that an inspector may order the exporter or agent to clean, treat or fumigate a contaminated ship's hold.

(4) A storage facility or a railway or road truck shall -

- (a) visibly be free from insects; and
- (b) be reasonably free from pieces of grain or any other material that may harbour insects:

Provided that an inspector may order the exporter or agent to clean, treat or fumigate a contaminated storage facility, or railway truck or road truck.

PACKING REQUIREMENTS

General

8. (1) Lesser known types of maize of different classes and grades shall be packed in different containers;
- (2) Bags shall be filled to capacity and properly closed;
- (3) Pallets manufactured from wood shall be without bark and such pallets shall comply with the requirements as stated in the International Standards for Phytosanitary Measures (ISPM 15).

MARKING REQUIREMENTS

Particulars

9. (1) Each container or the accompanying export documents of a consignment of lesser known types of maize shall be endorsed with -

- (a) the name of the product;
- (b) the grade of the lesser known types of maize;
- (c) the name and address of the exporter or packer: Provided that if the name and address concerned are indicated in a code such code shall be registered with the Executive Officer.
- (d) the country of origin: Provided that no abbreviations or the expression "South Africa" on its own shall be used;
- (e) the producer's code or silo code which is registered with the Executive Officer by the producer, exporter or packhouse, as the case may be: Provided that -
 - (i) if a producer has more than one farm, each farm shall be registered separately;
 - (ii) such code shall be preceded by the expression "producer", "silo", "packer", "PUC", "FBO", as the case may be, or any other suitable term having similar meaning; and
- (f) the lot number of the consignment concerned.

(2) Subject to the provision of subitem (1), each outer container containing prepacked units, shall be marked with an indication of the total number of prepacked units per outer container: Provided that the total number of prepacked units are visible from the outside, it does not have to be indicated on the outer container.

Prohibited particulars

10. No wording, illustration or other device of expression which constitutes a misrepresentation or which, directly or by implication, creates a misleading impression of the contents, shall appear on a container which contains lesser known types of maize.

SAMPLING

General

11. (1) An inspector shall for the purpose of these standards and requirements draw a random sample of lesser known types of maize in the following manner:

- (a) In the case of lesser known types of maize which is exported in bags, small quantities of lesser known types of maize shall be drawn in such a manner from a number of bags which is at least equal to the square root of the total number of bags in the consignment, that the samples drawn will be representative of the whole consignment. These samples shall be collected in a container and mixed thoroughly.
- (b) In the case of lesser known types of maize which is exported in bulk -
 - (i) samples of lesser known types of maize presented in bulk containers, excluding grain elevators, shall be drawn at each hatch or from at least six different places, chosen at random throughout the full depth of the consignment with a bulk grain probe in such a manner that the samples drawn shall be representative of the contents of the bulk container. The collective sample from each bulk container shall be mixed thoroughly and kept separate for each bulk container for further examination and shall have a total mass of at least 10 kg; and
 - (ii) samples of lesser known types of maize which are loaded from a grain elevator into a ship's hold, or railway truck or road truck shall be drawn at regular intervals at the outflow of the shipping bins on to the conveyor belts in such a manner that the samples drawn shall be representative of the consignment which is loaded. Each separate sample shall be mixed thoroughly before further examination and the collective sample shall have a total mass of at least 10 kg.

(2) An inspector may at any time draw samples of lesser known types of maize from any part of a grain elevator. The sample drawn from a consignment be kept into two separate lots.

Deviating sample

12. If an inspector should notice during the course of drawing the random samples or during the inspection that any of the quantities of lesser known types of maize taken from any bag or portion of a bulk container are obviously inferior to, or differ from the contents of the containers which represent the remainder of the bags or from the other parts of the bulk container the inspector shall draw samples only out of such bags or portion of a bulk container with the inferior or differing lesser known types of maize, place them in a container and mix thoroughly. Samples drawn in this manner shall, in the application of these standards and requirements, be considered as deviating samples and the inspection results shall be based only on samples drawn from the containers of the deviating portion.

Obtaining a working sample

13. A working sample shall be obtained by dividing the random or deviating sample of the consignment according to the ICC (International Association for Cereal Chemistry) 101 (Approved 1960) Method.

INSPECTION METHODS

DETERMINATION OF PERCENTAGE OF DEVIATIONS

Determination of undesirable odours, chemical residues, insects, dangerous objects, poisonous substance and plant injurious organisms of phytosanitary importance

14. (1) A consignment of lesser known types of maize shall be sensorially assessed or a sample of a consignment shall be sensorially assessed or chemically analysed in order to determine -

- (a) whether it has a musty, sour or other undesirable odour;
- (b) whether it contains lesser known types of maize in or on which chemical residues occurs that render it unfit for human consumption or for processing into or utilization as food or feed;
- (c) whether it contains any insects;
- (d) whether it may contain declared plant injurious organisms of phytosanitary importance.
- (e) whether it contains any dangerous objects; and
- (f) whether it contains any poisonous substances.

Determination of percentage of defective maize

15. The percentage of defective maize in a consignment of lesser known types of maize shall be determined as follows:

- (a) Draw a sub sample of about 200 g by weighing from representative samples collected from the consignment.
- (b) Place the working sample on a 6.35 mm round hole sieve and screen the sample by moving the sieve 20 strokes to and fro, alternatively away from and towards the operator of the sieve. Move the sieve which rests on a table or other suitable smooth surface, 250 mm to 460 mm away from and towards the operator with each stroke. The prescribed 20 strokes must be completed within 20 to 30 seconds.
 - (i) Determine the mass of the matter that has passes through the sieve and express it as a percentage of the mass of the working sample.
- (c) Remove all defective maize kernels from that part of the working sample remaining on the sieve and determine the mass thereof.

- (d) Express the mass as a percentage of the mass of the working sample.
- (e) Calculate the sum of the masses determined in terms of subparagraph (i) and (ii).
- (f) Remove all defective maize kernels from that part of the working sample remaining on the sieve and determine the mass of the defective maize kernels thus removed;
- (g) Express the combined mass calculated in terms of subparagraph (v) as a percentage of the mass of the working sample.
- (h) Such percentage represents the percentage of defective maize in the consignment.

Determination of the quantity of poisonous seeds

16. The number of poisonous seeds in a consignment of lesser known types of maize is determined as follows:

- (a) Obtain a working sample of at least 2 kg lesser known types of maize from either a random or a deviating sample, as the case may be.
- (b) Sort the working sample in such a manner that the poisonous seeds are retained.
- (c) Determine the number of poisonous seeds.
- (d) Such quantity represents the number of poisonous seeds in the consignment concerned.

Determination of percentage of foreign matter

17. The percentage of foreign matter in a consignment of lesser known types of maize shall be determined as follows:

- (a) Obtain a working sample of at least 200 g lesser known types of maize from either a random or a deviating sample, as the case may be.
- (b) Sort the working sample in such a manner that the foreign matter is retained.
- (c) Determine the mass of the foreign matter so obtained and express it as a percentage of the mass of the working sample.
- (c) Such percentage represents the percentage of foreign matter in the consignment.

Determination of percentage of insect damaged kernels

18. The percentage of insect damaged kernels in a consignment of lesser known types of maize is determined as follows:

- (a) Obtain a working sample of at least 200 g lesser known types of maize from either a random or a deviating sample, as the case may be, after the foreign matter and poisonous seeds have been removed.
- (b) Sort the working sample in such a manner that the insect damaged kernels are retained.
- (c) Determine the mass of the insect damaged kernels and express it as a percentage of the mass of the working sample.
- (d) Such percentage represents the percentage of insect damaged kernels in the consignment.

Determination of percentage of broken kernels

19. The percentage of broken kernels in a consignment of lesser known types of maize is determined as follows:

- (a) Obtain a working sample of at least 200 g lesser known types of maize from either a random or a deviating sample, as the case may be, after the foreign matter, undesirable/poisonous seeds and insect damaged kernels have been removed.
- (b) Sort the working sample in such a manner that the broken kernels are retained.
- (c) Determine the mass of the broken kernels and express it as a percentage of the mass of the working sample.
- (d) Such percentage represents the percentage of broken kernels in the consignment.

Determination of kernel count per 10 g

20. The kernel count per 10 g in a consignment of lesser known types of maize, if so requested, is determined as follows:

- (a) Obtain three working samples of 10 g each, after all poisonous seeds, foreign matter, broken kernels and insect damaged kernels have been removed.

- (b) Count the number of kernels in each of the working samples and determine the average of the three working samples.
- (c) Such average represents the kernel count per 10 g of a consignment of lesser known types of maize.

Determination of volume of popped popcorn obtained (expansion ratio)

21. The volume of popped popcorn is determined as follows with an industrial standard metric weight/volume tester:

- (a) Obtain a working sample (Item 13 sample divider) of 250 g of raw popcorn as obtained in item 11(2) after all foreign matter and poisonous seeds have been removed.
- (b) Set the power of the tester at 1400 watts and the temperature at 240°C (\pm 480°F), add the 63 g of oil while the pot is still cold.
- (c) When the popping pan reaches a temperature of 240°C, add the 250 g of popcorn kernels.
- (d) Determine the volume of popped popcorn after completion of the popping process, as well as of the time that has to pass afterwards as prescribed in the directions for use of the apparatus, the popped volume is determined in a cylinder of 13 cm in diameter and calibrated to provide a reading in ml/g.
- (e) Such volume represents the popped popcorn of a consignment.

Determination of popping percentage

22. The popping percentage of a consignment of popcorn is determined as follows:

- (a) Take the popped popcorn obtained in item 20 as a working sample.
- (b) Sort the working sample in such a manner that the popcorn kernels which have not popped are retained and determine the mass thereof.
- (c) Express the mass determined in paragraph (b) as a percentage of the mass of the working sample of raw popcorn prescribed in item 19(a).
- (d) Subtract the percentage determined in paragraph (c) from 100.
- (e) The percentage thus obtained represents the popping percentage of the popcorn in the consignment concerned.

Determination of the moisture content

23. The moisture content of a consignment of lesser known types of maize may be determined according to any suitable method: Provided that the results thus obtained are in accordance ($\pm 0,3$ per cent) with the results obtained by means of the 72 hour oven dried method (AACCI Method 44-15.02).

INTERPRETATION OF RESULTS

General

24. (1) No consignment may be rejected before a further two analyses are made from an additional sample obtained from the same or an additional random sample: Provided that the average of the results of all such analyses shall be regarded as the result in respect of the consignment concerned.

(2) An inspector shall, if he/she had drawn a deviating sample in accordance with item 12, reject the consignment if the average of the results of at least two analyses of the deviating sample does not comply with the requirements as stipulated in items 4, 5 and 6.

RELEASE OF LESSER KNOWN TYPES OF MAIZE

Application for release

25. An application for an approval for the release of lesser known types of maize shall, in the case where one or more cargo spaces of the ship are to be filled to capacity with such lesser known types of maize, be directed in writing by the exporter or agent to the inspector.

Approval of release

26. (1) An inspector issues a certificate as approval of the release of lesser known types of maize if the inspector finds that the ship's hold complies with the requirements in item 7(3).

(2) If an inspector finds that the ship's hold does not comply with the requirements in item 7(3), the inspector shall -

- (a) issue a certificate to that effect;
- (b) re-inspect the ship's hold after the ship's hold has been cleaned, treated or fumigated; and
- (c) issue a certificate as an approval for the release of lesser known types of maize and if she/he has found during the re-inspection that the ship's hold complies with the requirement in item 7(3).

(3) An inspector may at his/her discretion re-inspect the ship's hold if the release of lesser known types of maize into the ship's hold occurs more than 96 hours after approval of the ship's hold.

(4) The granting of approval for the release of lesser known types of maize shall not serve as an assurance that the ship's hold is free of insects that could infest lesser known types of maize in that ship's hold.