



EAS 47:2010  
ICS 67.080.10

## EAST AFRICAN STANDARD

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Fresh papaya — Specification and grading



EAST AFRICAN COMMUNITY

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HS 0807.20.00

## Foreword

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

In order to meet the above objectives, the EAC Partner States have enacted an East African Standardization, Quality Assurance, Metrology and Test Act, 2006 (EAC SQMT Act, 2006) to make provisions for ensuring standardization, quality assurance, metrology and testing of products produced or originating in a third country and traded in the Community in order to facilitate industrial development and trade as well as helping to protect the health and safety of society and the environment in the Community.

East African Standards are formulated in accordance with the procedures established by the East African Standards Committee. The East African Standards Committee is established under the provisions of Article 4 of the EAC SQMT Act, 2006. The Committee is composed of representatives of the National Standards Bodies in Partner States, together with the representatives from the private sectors and consumer organizations. 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 procedures of the Community.

Article 15(1) of the EAC SQMT Act, 2006 provides that "Within six months of the declaration of an East African Standard, the Partner States shall adopt, without deviation from the approved text of the standard, the East African Standard as a national standard and withdraw any existing national standard with similar scope and purpose".

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.

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## Introduction

This second edition of this standard supersedes and cancels EAS 47:2000, *Fresh papaya Specification*

In the preparation of this East African Standard, the following sources were consulted extensively:

CODEX STAN 183:1993 (Rev. 2005), *Standard for Papaya*

CODEX STAN 193:1995 (Rev.5:2009), *General Standard for Contaminants and Toxins in Foods*

CODEX STAN 228:2001 (Rev.1:2004), *General methods of analysis for contaminants*

CODEX STAN 230:2001 (Rev.1:2003), *Maximum levels for lead*

Codex Alimentarius website: [http://www.codexalimentarius.net/mrls/pestdes/jsp/pest\\_q-e.jsp](http://www.codexalimentarius.net/mrls/pestdes/jsp/pest_q-e.jsp)

USDA Foreign Agricultural Service website: <http://www.mrlidatabase.com>

USDA Agricultural Marketing Service website: <http://www.ams.usda.gov/AMSV1.0/Standards>

USDA Plant Inspectorate Service website: [http://www.aphis.usda.gov/import\\_export/plants](http://www.aphis.usda.gov/import_export/plants)

European Union: [http://ec.europa.eu/sanco\\_pesticides/public](http://ec.europa.eu/sanco_pesticides/public)

Assistance derived from these sources and others inadvertently not mentioned is hereby acknowledged.

This standard has been developed to take into account:

- the needs of the market for the product;
- the need to facilitate fair domestic, regional and international trade and prevent technical barriers to trade by establishing a common trading language for buyers and sellers.
- the structure of the CODEX, UNECE, USA, ISO and other internationally significant standards;
- the needs of the producers in gaining knowledge of market standards, conformity assessment, commercial cultivars and crop production process;
- the need to transport the product in a manner that ensures keeping of quality until it reaches the consumer;
- the need for the plant protection authority to certify, through a simplified form, that the product is fit for crossborder and international trade without carrying plant disease vectors;
- the need to promote good agricultural practices that will enhance wider market access, involvement of small-scale traders and hence making fruit and vegetable production a viable means of wealth creation; and
- the need to keep unsatisfactory produce from the market by allowing the removal of unsatisfactory produce from the markets and to discourage unfair trade practices e.g. trying to sell immature produce at the beginning of the season when high profits can be made. Immature produce leads to dissatisfaction of customers and influences their choices negatively, which disadvantages those traders who have waited until the produce is mature.

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## Fresh papaya — Specification and grading

### 1 Scope

This Standard applies to fruits of commercial varieties of papayas grown from *Carica papaya* L., of the *Caricaceae* family, to be supplied fresh to the consumer, after preparation and packaging. Papayas for industrial processing are excluded.

### 2 Normative references

The following referenced documents are indispensable for the application 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.

CAC/GL 21, *Principles for the Establishment and Application of Microbiological Criteria for Foods*

CAC/RCP 1, *Recommended International Code of Practice — General Principles of Food Hygiene*

CAC/RCP 44, *Recommended International Code of Practice for the Packaging and Transport of Tropical Fresh Fruit and Vegetables*

CAC/RCP 53, *Code of Hygienic Practice for Fresh Fruits and Vegetables*

EAS 38, *Labelling of prepackaged foods — Specification*

CD/K/378:2010, *Horticultural industry — Code of practice*

### 3 Definitions

For the purpose of this standard, the following definitions apply:

#### 3.1

##### **disease**

any unhealthy condition caused by any organism such as fungus, bacteria, virus or insect

#### 3.2

##### **injury**

any defect which more than slightly affects the appearance or edible quality of the papaya.

#### 3.3

##### **package**

any kind of legal or acceptable material that can hold a product and carry it safely to its destination.

### 4 Provisions concerning quality

#### 4.1 Minimum requirements

4.1.1 In all classes, subject to the special provisions for each class and the tolerances allowed, the papayas 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;

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- practically free of damage caused by pests;
- practically free of pests affecting the general appearance of the produce;
- free of abnormal external moisture, excluding condensation following removal from cold storage;
- free of any foreign smell and/or taste<sup>1</sup>.
- firm;
- fresh in appearance;
- free of damage caused by low and/or high temperatures.

The peduncle, if present, should not exceed a length of 1 cm.

**4.1.2** The papayas must have been carefully picked and have reached an appropriate degree of development and ripeness account being taken of the characteristics of the variety and/or commercial type and the area in which they are grown.

The development and condition of the papayas must be such as to enable them:

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

### 4.2 Classification

Papayas are classified in three classes defined below.

#### 4.2.1 “Extra” Class

Papayas in this class must be 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 defects, provided these do not affect the general appearance of the produce, the quality, the keeping quality and presentation in the package.

#### 4.2.2 Class I

Papayas in this class must be of good quality. They must be characteristic of the variety and/or commercial type. The following slight defects, however, may be allowed, provided these do not affect the general appearance of the produce, the quality, the keeping quality and presentation in the package:

- slight defects in shape;
- slight skin defects (i.e. mechanical bruising, sun spots and/or latex burns). The total area affected shall not exceed 10% of the total surface.

The defects must not, in any case, affect the pulp of the fruit.

#### 4.2.3 Class II

This class includes papayas which do not qualify for inclusion in the higher classes, but satisfy the minimum requirements specified in 4.1 above. The following defects, however, may be allowed,

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<sup>1</sup> This provision allows for smell caused by conservation agents used in compliance with corresponding regulations.

provided the papayas retain their essential characteristics as regards the quality, the keeping quality and presentation:

- defects in shape;
- defects in colouring;
- skin defects (i.e., mechanical bruising, sun spots and latex burns). The total area affected should not exceed 15% of the total surface;
- slight marks caused by pests.

The defects must not, in any case, affect the pulp of the fruit.

## 5 Provisions concerning sizing

Size is determined by the weight of the fruit with a minimum weight of 200 g, in accordance with the following table:

Size Code	Weight (in grams)
A	200 – 300
B	301 – 400
C	401 – 500
D	501 – 600
E	601 – 700
F	701 – 800
G	801 – 1100
H	1101 – 1500
I	1501 – 2000
J	> 2001

## 6 Provisions concerning tolerances

Tolerances in respect of quality and size shall be allowed in each package (or in each lot for produce presented in bulk) for produce not satisfying the requirements of the class indicated.

### 6.1 Quality tolerances

#### 6.1.1 “Extra” Class

Five percent by number or weight of papayas not satisfying the requirements of the class, but meeting those of Class I or, exceptionally, coming within the tolerances of that class.

#### 6.1.2 Class I

Ten percent by number or weight of papayas not satisfying the requirements of the class, but meeting those of Class II or, exceptionally, coming within the tolerances of that class.

#### 6.1.3 Class II

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

### 6.2 Size tolerances

For all classes, 10% by number or weight of papayas corresponding to the size immediately above and/or below that indicated on the package, with a minimum of 190 g for those papayas packed in the smallest size range.

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## 7 Provisions concerning presentation

### 7.1 Uniformity

The contents of each package (or lot for produce presented in bulk) must be uniform and contain only papayas of the same origin, variety and/or commercial type, quality and size. For "Extra" Class, colour and ripeness should be uniform. The visible part of the contents of the package (or lot for produce presented in bulk) must be representative of the entire contents.

### 7.2 Packaging

Papayas must be packed in such a way as to protect the produce properly. The materials used inside the package must be new<sup>2</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.

Papayas shall be packed in each container in compliance with CAC/RCP 44.

#### 7.2.1 Description of containers

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

## 8 Marking or labelling

### 8.1 Consumer packages

In addition to the requirements of EAS 38, the following specific provisions apply:

#### 8.1.1 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 name of the variety and/or commercial type.

### 8.2 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.

#### 8.2.1 Identification

The exporter, packer and/or dispatcher shall be identified by name and physical address (e.g. street/city/region/postal code and, if different from the country of origin, the country) or a code mark officially recognized by the national authority.<sup>3</sup>

#### 8.2.2 Nature of produce

Name of the produce if the contents are not visible from the outside. Name of the variety and/or commercial type.

<sup>2</sup> For the purposes of this Standard, this includes recycled material of food-grade quality.

<sup>3</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, and the code mark should be preceded by the ISO 3166 (alpha) country/area code of the recognizing country, if not the country of origin.

**8.2.3 Origin of produce**

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

**8.2.4 Commercial Identification**

- Class;
- Size (size code or average weight in grams);
- Number of units (optional);
- Net weight (optional).

**8.2.5 Official Inspection Mark (optional)****9 Contaminants****9.1 Heavy metals**

Papayas shall comply with those maximum levels for heavy metals established by the Codex Alimentarius Commission for this commodity. The current limits are as indicated below:

Metal	Unit of measurement	Maximum limit	Test method
Lead (Pb)	mg/kg wet weight	0.10	ISO 6633 (AAS)
Cadmium (Cd)	mg/kg wet weight	0.050	ISO 6561-1 or 6561-2

**9.2 Pesticide residues**

Papayas shall comply with those maximum pesticide residue limits established by the Codex Alimentarius Commission for this commodity. The table below provides current MRLs while Annex E provides current MRLs for the USA, EU and Codex markets.

**Maximum pesticide residue limits and extraneous maximum residue limits in papaya (current as at 2009-06-09)**

Type	Unit symbol	Limit	Method of test	Notes
DIFENOCONAZOLE	MRL (mg/kg)	0.2		
DITHIOCARBAMATES	MRL (undef)	5		Source of data: mancozeb
ENDOSULFAN	MRL (mg/kg)	0.5		
PYRACLOSTROBIN	MRL (undef) (*)	0.05		
THIABENDAZOLE	MRL (mg/kg)	10		Used also as veterinary drug

**10 Hygiene**

**10.1** It is recommended that the produce covered by the provisions of this Standard be prepared and handled in accordance with the appropriate sections of CAC/RCP 1, CAC/RCP 53, and other relevant Codex texts such as Codes of Hygienic Practice and Codes of Practice.

**10.2** The produce should comply with any microbiological criteria established in accordance with CAC/GL 21.



Fresh market papaya



Fresh market papaya

Standard

draft

Draft for

Standard



Green papayas



Maturing Carica papaya — Varieties and shapes

Draft for



Fresh Holland papaya



Pineapple banana papaya

ward

ed

Draft for



Green papaya — Varieties



Papaya farm



Pre-packed papaya

Draft for comment




Pre-packed papaya

Draft for comments only — Not to be cited

Standard

**Annex C**  
(informative)

**Model certificate of conformity with standards for fresh fruits and vegetables**

1. Trader:	Certificate of conformity with the Community marketing standards applicable to fresh fruits and vegetables  No. ....  (This certificate is exclusively for the use of inspection bodies)		
2. Packer identified on packaging (if other than trader)	3. Inspection body		
	4. Place of inspection/country of origin <sup>(1)</sup>	5. Region or country of destination	
6. Identifier of means of transport	7. <input type="checkbox"/> Internal <input type="checkbox"/> Import <input type="checkbox"/> Export		
8. Packages (number and type)	9. Type of product (variety if the standards specifies)	10. Quality Class	11. Total net weight in kg
12. The consignment referred to above conforms, at the time of issue, with the Community standards in force, vide: <u>EAS 47:2010, Fresh papaya — Specification and grading</u> <hr/> Customs office foreseen ..... Place and date of issue ..... Valid until (date): ..... Signatory (name in block letters): .....  Signature ..... Seal of competent authority .....			
13. Observations:			

<sup>(1)</sup> Where the goods are being re-exported, indicate the origin in box 9.

**Annex D**  
(informative)

**Papaya — Fact sheet**

**D.1 Introduction**

**D.1.1 Common Names:** Papaya, Papaw or Paw Paw (Australia), Mamao (Brazil), Tree Melon.

**D.1.2 Related Species:** Babaco (*Carica pentagona*), Mountain Papaya (*C. pubescens*), Chamburo (*C. stipulata*).

**D.1.3 Origin:** The papaya is believed to be native to southern Mexico and neighboring Central America. It is now present in every tropical and subtropical country.

**D.1.4 Adaptation:** Papayas have exacting climate requirements for vigorous growth and fruit production. They must have warmth throughout the year and will be damaged by light frosts. Brief exposure to 0 °C is damaging and prolonged cold without overhead sprinkling will kill the plants. Cold, wet soil is almost always lethal. Cool temperatures will also alter fruit flavour. Papayas make excellent container and greenhouse specimens where soil moisture and temperature can be moderated.

**D.2 Description**

**D.2.1 Growth habit**

The papaya is a short-lived, fast-growing, woody, large herb to 10 or 12 feet in height. It generally branches only when injured. All parts contain latex. The hollow green or deep purple trunk is straight and cylindrical with prominent leaf scars. Its diameter may be from 5 or 8 cm to over a 30 cm at the base.

**D.2.2 Foliage**

The leaves emerge directly from the upper part of the stem in a spiral on nearly horizontal petioles 30 cm to 105 cm long. The blade, deeply divided into 5 to 9 main segments, varies from 30 cm to 60 cm in width, and has prominent yellowish ribs and veins. The life of a leaf is 4 to 6 months.

**D.2.3 Flowers**

The five-petalled flowers are fleshy, waxy and slightly fragrant. Some plants bear only short-stalked female flowers, or bisexual (perfect) flowers also on short stalks, while others may bear only male flowers, clustered on panicles 150 or 180 cm long. Some plants may have both male and female flowers. Others at certain seasons produce short-stalked male flowers, at other times perfect flowers. This change of sex may occur temporarily during high temperatures. Male or bisexual plants may change completely to female plants after being beheaded. Certain varieties have a propensity for producing certain types of flowers. For example, the Solo variety has flowers of both sexes 66% of the time, so two out of three plants will produce fruit, even if planted singly. How pollination takes place in papayas is not known with certainty. Wind is probably the main agent, as the pollen is light and abundant, but thrips and moths may assist. Hand pollination is sometimes necessary to get a proper fruit set.

**D.2.4 Fruit**

There are two types of papayas, Hawaiian and Mexican. Hawaiian papayas are pear-shaped fruit generally weighing about 450 g and have yellow skin when ripe. The flesh is bright orange or pinkish, depending on variety, with small black seeds clustered in the center. Hawaiian papayas are easier to harvest because the plants seldom grow taller than 2.4 m. Mexican papayas are much larger than the Hawaiian types and may weigh up to 4.5 kg and be more than 38 cm long. The flesh may be yellow, orange or pink. The flavor is less intense than that the Hawaiian papaya but still is delicious and

extremely enjoyable. They are slightly easier to grow than Hawaiian papayas. A properly ripened papaya is juicy, sweetish and somewhat like a cantaloupe in flavor, although musky in some types. The fruit (and leaves) contain papain which helps digestion and is used to tenderize meat. The edible seeds have a spicy flavor somewhat reminiscent of black pepper.

### **D.3 Culture**

#### **D.3.1 Location**

Papayas like to be warm with both sunshine and reflected heat, so the hottest place against the house where nothing else seems happy is an ideal location. They also like to be as free from wind as possible, although this is not as critical as their need for sun. Papayas can be grown successfully in shade, but the fruit is rarely sweet. They are best planted in mounds or against the foundation of a building where water can be controlled.

#### **D.3.2 Soils**

Papayas need a light, well-drained soil. They are easily killed by excess moisture. The soil needs to be moist in hot weather and dry in cold weather.

#### **D.3.3 Irrigation**

Watering is the most critical aspect in raising papayas. The plants should be kept on to the dry side to avoid root rot, but also need enough water to support their large leaves. In cold seasons the plant prefers to remain as dry as possible. A plant that has been injured by frost is particularly susceptible to root rot.

#### **D.3.4 Fertilization**

The fast-growing papaya requires regular applications of nitrogen fertilizers but the exact rates have not been established. Feed monthly and adjust according to the plant's response. They can take fairly hot organic fertilizing such as chicken manure if used with deep irrigation after warm weather has started. Phosphorus deficiency causes dark green foliage with a reddish-purple discoloration of leaf veins and stalks.

#### **D.3.5 Pruning**

Papayas do not need to be pruned, but some growers pinch the seedlings or cut back established plants to encourage multiple trunks.

#### **D.3.6 Frost protection**

Papayas need warmth and a frost-free environment, but can often withstand light freezes with some kind of overhead protection. This can be provided by building a frame around the plants and covering it with bedding, plastic sheeting, etc. when frost threatens. Electric light bulbs can also be used for added warmth. Potted specimens can be moved to a frost-secure area. Prolonged cold, even if it does not freeze, may adversely affect the plants and the fruit. Mexican papayas are more hardy than Hawaiian varieties.

#### **D.3.7 Propagation**

Papayas are normally propagated by seed. To start a plant, extract the seeds from ripe papayas and wash them to remove the gelatinous covering. They are then dried, dusted with a fungicide and planted as soon as possible (the seeds lose their viability rapidly in storage). Plant the seeds in warm (27 °C), sterile potting mix. Seeds should be planted in sterile soil as young papaya seedlings have a high mortality rate from damping off. Potting soil can be sterilized by mixing 50-50 with vermiculite and placing in an oven at 93 °C for one hour. Under ideal conditions the seeds may germinate in about two weeks, but may take three to five weeks. Gibberellic acid can be used to speed up germination in some seasons. Seedlings usually begin flowering 9 – 12 months after they germinate.

Seedling papayas do not transplant well. Plant them in large containers so the seedlings will have to be transplanted only once, when they go into the ground. Transplant carefully, making sure not to damage the root ball. To prevent damping off, drench the potting mix with a fungicide containing benomyl or captan. Set the plants a little high to allow for settling. A plastic mulch will help keep the soil warm and dry in wet areas, but remove it as soon as the weather becomes warm. Plant at least three or four plants to insure yourself of having females or plant hermaphroditic plants.

Papaya plants can also be grown from cuttings, which should be hardened off for a few days and then propped up with the tip touching moist, fertile soil until roots form. Semi-hardwood cuttings planted during the hot seasons root rapidly and should fruit the following year.

### D.3.8 Pests and diseases

Thrips, mites and white flies as well as the red spider and fruit spotting bugs are potential problems in some areas. The plants may also be attacked by mildew, anthracnose, root rot and various virus diseases. Fruit flies often ruin the fruit. Nematodes can attack the roots and are often a factor in the decline of individual plant. Gopher damage can be avoided by planting in wire baskets. Papaya plants should probably be replaced every 4 years or so.

### D.3.9 Harvest

Papayas are ready to harvest when most of the skin is yellow-green. After several days of ripening at room temperature, they will be almost fully yellow and slightly soft to the touch. Dark green fruit will not ripen properly off the tree, even though it may turn yellow on the outside. Mature fruit can be stored at 7 °C for about 3 weeks. Papayas are often sliced and eaten by themselves or served with a myriad of other foods. They can also be cooked to make chutney or various desserts. Green papayas should not be eaten raw because of the latex they contain, although they are frequently boiled and eaten as a vegetable. In the West Indies, young leaves are cooked and eaten like spinach. In India, seeds are sometimes used as an adulterant in whole black pepper.

## D.4 Cultivars

**Kamiya** — A selection from Waimanalo. Solo type. Small to medium-sized fruit. Distinct, blocky shape, very short neck. Deep yellow-orange skin and flesh, firm, juicy, very sweet. Dwarf, high-yielding plant.

**Mexican Red** — A rose-fleshed papaya that is lighter in flavor than Mexican Yellow. Medium to very large fruit. Generally not as sweet as Hawaiian types.

**Mexican Yellow** — A very sweet and flavorful, yellow-fleshed papaya. Medium to large fruit, can grow up to 4.5 kg. Generally not as sweet as Hawaiian types.

**Solo** — Fruit round and shallowly furrowed in female plants, pear-shaped in bisexual plants. Weight 0.5 kg to 1 kg. Skin smooth, flesh firm, reddish-orange, very sweet, of excellent quality. Produces no male plants, only bisexual and female in a 2 to 1 ratio. Named Solo in 1919.

**Sunrise (Sunrise Solo)** — Pear-shaped fruit with a slight neck. Averages 616 g to 728 g depending on location. Skin smooth, flesh firm, reddish-orange, sweet, sugar content high. Quality similar to Solo. Seed cavity not as deeply indented as other Solo strains, making seed removal easier. Plant precocious, maturing fruit about 9 months after transplanting, at a height of about 1 m.

**Sunset (Sunset Solo)** — Solo type. Small to medium-sized, pear-shaped fruit. Orange-red skin and flesh. Very sweet. Dwarf, high yielding plant.

**Vista Solo** — Medium to large fruit depending on climate, 13 cm wide, up to 45 cm long. Skin yellow, flesh orange to yellow-orange. Hardy, compact Solo type producing high quality fruit. Needs fairly hot weather to develop sweetness. Self-fertile.

**Waimanalo (Waimanalo Solo, X-77)** — Fruit round with a short neck, average weight 448 g to 1092 g. Skin smooth, and glossy, cavity star-shaped. Flesh thick, firm, orange-yellow in colour, flavour and quality high, keeps well. Recommended for fresh market and processing. Fruits of female plants rough in appearance. Average height to the first flower is 9.6 m.

## Annex E (informative)

### Papaya — Codex, EU and USA pesticide residue limits

Users are advised that international regulations and permissible Maximum Residue Levels (MRL) frequently change. Although this International MRL Database is updated frequently, the information in it may not be completely up-to-date or error free. Additionally, commodity nomenclature and residue definitions vary between countries, and country policies regarding deferral to international standards are not always transparent. This database is intended to be an initial reference source only, and users must verify any information obtained from it with knowledgeable parties in the market of interest prior to the sale or shipment of any products. The developers of this database are not liable for any damages, in whole or in part, caused by or arising in any way from user's use of the database.

#### Results Key

MRL values in *{Italics}* are more restrictive than US

--- indicates no MRL value is established.

Cod, EU, etc. indicates the source of the MRL and EXP means the market defers to the exporting market.

All numeric values listed are in parts per million (ppm), unless otherwise noted

Azoxystrobin	US	Cod	EU
	2	---	<i>{0.2}</i>
Bifenazate	US	Cod	EU 1
	7	---	<i>{0.01}</i>
	1. European Union does not maintain a specific MRL for the Bifenazate/Papaya combination, but does maintain an MRL of 0.01 PPM for its "Miscellaneous fruit" group.		
Boscalid	US	Cod	EU
	1.5	---	<i>{0.05}</i>
Buprofezin	US	Cod	EU
	0.9	---	<i>{0.05}</i>
Carfentrazone-ethyl	US	Cod	EU 2
	0.1	---	<i>{0.01}</i>
	2. European Union does not maintain a specific MRL for the Carfentrazone-ethyl/Papaya combination, but does maintain an MRL of 0.01 PPM for its "Fruit Fresh or Frozen; Nuts" group.		
Chlorothalonil	US	Cod	EU
	15	---	20
Cyprodinil	US	Cod	EU 3
	1.2	---	<i>{0.05}</i>
	3. European Union does not maintain a specific MRL for the Cyprodinil/Papaya combination, but does maintain an MRL of 0.05 PPM for its "Miscellaneous fruit" group.		
Diuron	US	Cod	EU 4
	0.5	---	<i>{0.1}</i>
	4. European Union does not maintain a specific MRL for the Diuron/Papaya combination, but does maintain an MRL of 0.1 PPM for its "Inedible peel, large" group.		
Fenbutatin-oxide	US	Cod	EU
	2	---	<i>{0.05}</i>
Fenpropathrin	US	Cod	EU 5
	1	---	<i>{0.01}</i>
	5. European Union does not maintain a specific MRL for the Fenpropathrin/Papaya combination, but does maintain an MRL of 0.01 PPM for its "Miscellaneous fruit" group.		
Fludioxonil	US	Cod	EU
	0.45	---	<i>{0.05}</i>
Glyphosate	US	Cod	EU 6
	0.2	---	<i>{0.1}</i>
	6. European Union does not maintain a specific MRL for the Glyphosate/Papaya combination, but does maintain an MRL of 0.1 PPM for its "Inedible peel, large" group.		
Inorganic bromide resulting from fumigation	US	Cod 7	EU
	20	20	50
	7. Codex does not maintain a specific MRL for the Inorganic bromide resulting from fumigation/Papaya combination, but does maintain an MRL of 20 PPM for its "Fruits (except as otherwise listed)" group.		

Malathion	<b>US</b>	<b>Cod</b>	<b>EU 8</b>
	1	---	{0.02}
	8. European Union does not maintain a specific MRL for the Malathion/Papaya combination, but does maintain an MRL of 0.02 PPM for its "Miscellaneous fruit" group.		
Mancozeb	<b>US 9</b>	<b>Cod 10</b>	<b>EU</b>
	10	{5}	{7}
	9. This MRL refers to Papaya (whole fruit with no residue present in the edible pulp after the peel is removed and discarded). 10. The MRL is established for the sum of dithiocarbamates.		
Maneb	<b>US</b>	<b>Cod 11</b>	<b>EU</b>
	10	{5}	{7}
	11. The MRL is established for the sum of dithiocarbamates.		
Metalaxyl-M (Mefenoxam)	<b>US</b>	<b>Cod</b>	<b>EU 12</b>
	0.4	---	{0.05}
	12. European Union does not maintain a specific MRL for the Metalaxyl-M (Mefenoxam)/Papaya combination, but does maintain an MRL of 0.05 PPM for its "Miscellaneous fruit" group.		
Methoxyfenozide	<b>US</b>	<b>Cod</b>	<b>EU 13</b>
	0.6	---	{0.02}
	13. European Union does not maintain a specific MRL for the Methoxyfenozide/Papaya combination, but does maintain an MRL of 0.02 PPM for its "Inedible peel, large" group.		
Myclobutanil	<b>US</b>	<b>Cod</b>	<b>EU</b>
	3	---	{0.02}
Oxyfluorfen	<b>US</b>	<b>Cod</b>	<b>EU 14</b>
	0.05	---	0.05
	14. European Union does not maintain a specific MRL for the Oxyfluorfen/Papaya combination, but does maintain an MRL of 0.05 PPM for its "Inedible peel, large" group.		
Paraquat dichloride	<b>US</b>	<b>Cod 15</b>	<b>EU 16</b>
	0.05	{0.01}	{0.02}
	15. Codex does not maintain a specific MRL for the Paraquat dichloride/Papaya combination, but does maintain an MRL of 0.01 PPM for its "Assorted tropical and sub-tropical fruits - inedible peel" group. 16. European Union does not maintain a specific MRL for the Paraquat dichloride/Papaya combination, but does maintain an MRL of 0.02 PPM for its "Fruit Fresh or Frozen; Nuts" group.		
Phosphine	<b>US</b>	<b>Cod</b>	<b>EU 17</b>
	0.01	---	0.05
	17. European Union does not maintain a specific MRL for the Phosphine/Papaya combination, but does maintain an MRL of 0.05 PPM for its "Fruit Fresh or Frozen; Nuts" group.		
Pyraclostrobin	<b>US</b>	<b>Cod</b>	<b>EU</b>
	0.6	{0.05}	{0.05}
Pyridaben	<b>US</b>	<b>Cod</b>	<b>EU</b>
	0.1	---	0.5
Pyriproxyfen	<b>US</b>	<b>Cod</b>	<b>EU 18</b>
	1	---	{0.05}
	18. European Union does not maintain a specific MRL for the Pyriproxyfen/Papaya combination, but does maintain an MRL of 0.05 PPM for its "Miscellaneous fruit" group.		
Spinetoram	<b>US</b>	<b>Cod</b>	<b>EU 19</b>
	0.3	---	{0.05}
	19. European Union does not maintain a specific MRL for the Spinetoram/Papaya combination, but does maintain an MRL of 0.05 PPM for its "Miscellaneous fruit" group.		
Spinosad	<b>US</b>	<b>Cod</b>	<b>EU</b>
	0.3	---	0.5
Thiabendazole	<b>US</b>	<b>Cod</b>	<b>EU</b>
	5	10	10
Trifloxystrobin	<b>US</b>	<b>Cod</b>	<b>EU</b>
	0.7	---	1
Triflumizole	<b>US</b>	<b>Cod</b>	<b>EU 20</b>
	2.5	---	{0.1}
	20. European Union does not maintain a specific MRL for the Triflumizole/Papaya combination, but does maintain an MRL of 0.1 PPM for its "Miscellaneous fruit" group.		

*Draft for comments only — Not to be cited as East African Standard*