INTERNATIONAL STANDARD 1838

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Fresh pineapples — Guide to storage and transport

Ananas frais — Guide pour l'entreposage et le transport

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FOREWORD

ISO (the International Organization for Standardization) is a worldwide federation of national standards institutes (ISO Member Bodies). The work of developing International Standards is carried out through ISO Technical Committees. Every Member Body interested in a subject for which a Technical Committee has been set up has the right to be represented on that Committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work.

Draft International Standards adopted by the Technical Committees are circulated to the Member Bodies for approval before their acceptance as International Standards by the ISO Council.

Prior to 1972, the results of the work of the Technical Committees were published as ISO Recommendations; these documents are now in the process of being transformed into International Standards. As part of this process, Technical Committee ISO/TC 34 has reviewed ISO Recommendation R 1838 and found it technically suitable for transformation. International Standard ISO 1838 therefore replaces ISO Recommendation R 1838-1970 to which it is technically identical.

ISO Recommendation R 1838 was approved by the Member Bodies of the following countries :

Australia	Hungary	Poland
Brazil	India	Portugal
Chile	Iran	Romania
Czechoslovakia	Israel	South Africa, Rep. of
Egypt, Arab Rep. of	Netherlands	Turkey
France	New Zealand	United Kingdom
Greece	Peru	U.S.S.R.

No Member Body expressed disapproval of the Recommendation.

The Member Body of the following country disapproved the transformation of ISO/R 1838 into an International Standard.

Poland

Printed in Switzerland

Fresh pineapples — Guide to storage and transport

0 INTRODUCTION

Fresh pineapples produced in regions far from places of consumption should be kept in the cold.

The degree of ripeness at harvest time, which determines the duration of storage, should be chosen according to the duration of transport and marketing operations. This duration varies considerably; hence the clause dealing with the ripeness of the pineapples cannot have a general application.

The external coloration of the pineapples is not a safe criterion for ripeness and it is necessary to give a criterion for actual ripeness.

The condition of the pineapples on arrival at the warehouse (physiological condition, soundness, injuries) has a direct bearing upon the behaviour during storage, which justifies the detailed recommendations made on this subject.

1 SCOPE AND FIELD OF APPLICATION

This International Standard describes the conditions for the successful keeping, with or without the aid of artificial cooling, of fresh pineapples, *Ananas comosus* (Linnaeus) Merrill, during storage between the place of production and the place of consumption and during maritime transport.

2 REFERENCE

ISO 2169, *Fruits and vegetables — Physical conditions in cold stores — Definitions and measurement.*

3 CONDITIONS FOR HARVESTING AND PUTTING INTO STORE

3.1 Varieties

The products covered by this International Standard are fresh fruits, intended for storage and belonging to the following cultivars :

- Cayenne lisse (type and Hilo)
- Baronne de Rotschild
- Queen (Natal Queen, Ripley Queen, MacGregor, Comte de Paris, Alexandra)
- Abacaxi (Sugarloaf, Eleuthera, Pernambuco)
- Red Spanish (Singapore, Spanish, Cabezona)

This list is not restrictive.

3.2 Harvesting

The degree of ripeness of fresh pineapples should be determined in terms of their physiological condition[1] and the number of days which will elapse between harvesting and sale to the retailer.

Three degrees of *apparent* ripeness can be distinguished, according to the outside coloration of the fruit, namely :

- degree of ripeness 1 : with the beginning of the orange-yellow coloration at the base of the fruit, which is called *fruit on the turn*;
- degree of ripeness 2 : the orange-yellow coloration having developed from the lower quarter to halfway up the fruit, which is called *half-ripe fruit*;
- degree of ripeness 3 : the orange-yellow coloration having extended from halfway to the whole of the fruit, which is called *ripe fruit*.

The coloration is not a safe criterion for the actual ripeness of pineapples.

The actual ripeness of pineapples is determined by examining the state of the flesh in a cross-section of the fruit at its largest diameter perpendicular to the vertical axis.

The earliest stage for storage corresponds to the degree of apparent ripeness 1.

Fruit of the Cayenne lisse variety which has gone beyond the optimum stage of ripeness has a cross-section with translucent areas covering more than half the surface of the section (excluding the surface of the core). The optimum stage for storage is defined by the degree of apparent ripeness 2 or 3 according to the keeping time, the colour of the flesh and the extent of the translucent zone in the cross-section of the fruit.

1) The physiological condition of the fruit is defined by its suitability at the time of harvest for reaching the required state of ripeness for consumption, at the point of retail sale, after normal storage or transport.