INTERNATIONAL STANDARD

ISO 8043

First edition
1990-12-01

Oriental leaf tobacco — Determination of form and size characteristics

Tabac oriental en feuilles — Détermination des caractéristiques de forme et de dimensions

Reference number
ISO 8043:1990(E)

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established 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. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 8043 was prepared by Technical Committee ISO/TC 126, *Tobacco and tobacco products*.

International Organization for Standardization
Case Postale 56 • CH-1211 Genève 20 • Switzerland

Printed in Switzerland

Oriental leaf tobacco — Determination of form and size characteristics

1 Scope

This International Standard specifies a method for determination of form and size characteristics of oriental leaf tobacco from transplanting until used as raw material for cigarette manufacture.

The method is applicable to all oriental varieties.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 4874:1981, *Tobacco — Sampling of batches of raw material — General principles.*

ISO 6488:1981, *Tobacco — Determination of water content (Reference method).*

3 Definitions

For the purposes of this International Standard, the following definitions apply.

3.1 leaf size: General dimension of the leaf (large, medium or small).

3.2 leaf length: The distance between the tip and the bottom of the leaf.

3.3 leaf width: The shortest distance between the opposite edges of the leaf at the widest part of it.

3.4 petiole: The leaf part which connects the limb of the leaf with the stalk of the plant.

3.5 sessile leaf: The type of leaf in which the leaf is attached to the stalk by the broadened base of the leaf.

3.6 diametrical ratio: The ratio of the leaf length and maximum width.

3.7 central distance: The distance between the base of the leaf and the maximum width of the leaf.

3.8 coefficient of ovality: The ratio of the leaf length and the central distance.

3.9 tip angle: The angle between the two tangents drawn from the tip of the leaf to the leaf edges.

4 Principle

Conditioning of intact leaves to a specified moisture content, mounting the leaves between glass plates for 24 h, tracing the outlines on to tracing paper and making the required measurement.

5 Apparatus

Usual laboratory apparatus and the following items:

5.1 Conditioning enclosure.

5.2 Two glass plates.

5.3 Calipers.

5.4 Ruler, with 1 mm graduations.

5.5 Tracing paper.

5.6 Protractor, with 1° graduations.

6 Laboratory sample

Take a sample as described in ISO 4874.

7 Test sample

Choose only regular and intact leaves from the laboratory sample (clause 6) even though this might mean that the test sample is not representative of the laboratory sample.

8 Procedure

Place the sample (clause 7) in the conditioning enclosure (5.1), suitable for producing a moisture content of 18 %, until the moisture content of the leaf is 18 % ± 0,5 % (m/m). Then place each leaf without applying pressure with the fingers, on one of the glass plates (5.2), with dimensions of 500 mm × 300 mm × 5 mm and mass of 2 400 g ± 50 g, and carefully cover with the second plate for 24 h.

Draw 10 outlines of each leaf on the tracing paper (5.4) placed on the glass. For each leaf, take five outlines which coincide with each other exactly. On each of five outlines draw tangents from the tip of the leaf to the two leaf edges.

Measure the tip angles (3.9) to the nearest 1°, using the protractor (5.6).

Measure the distance shown in 9.2 to 9.6 to the nearest 1 mm using the calipers (5.3) and the ruler (5.4). Calculate the ratios shown in 9.7 and 9.8.

NOTE 1 The moisture content should be measured by the method specified in ISO 6488 or by any other method for the determination of loss in mass on drying.

9 Expression of results (see figure 1 and figure 2)

Calculate the mean of each parameter (9.1 to 9.8) for each leaf measured.

9.1 Tip angle α, in degrees, to the nearest 1°.

9.2 Leaf length a, in millimetres, to the nearest 1 mm.

9.3 Leaf width b, in millimetres, to the nearest 1 mm.

9.4 Petiole length d, in millimetres, to the nearest 1 mm.

9.5 Petiole width e, in millimetres, to the nearest 0,1 mm.

9.6 Central distance c, in millimetres, to the nearest 1 mm.

9.7 Diametrical ratio (a/b), to the nearest 0,01.

9.8 Coefficient of ovality (a/c), to the nearest 0,01.

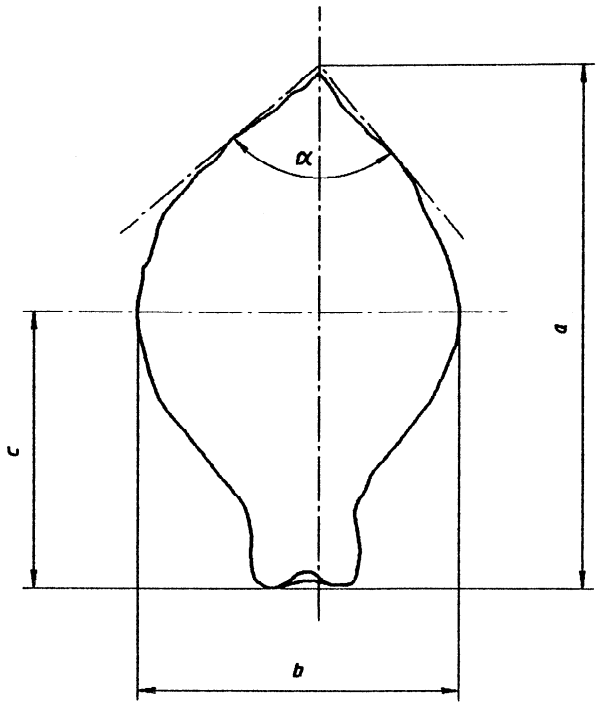

Figure 1 — Sessile leaf

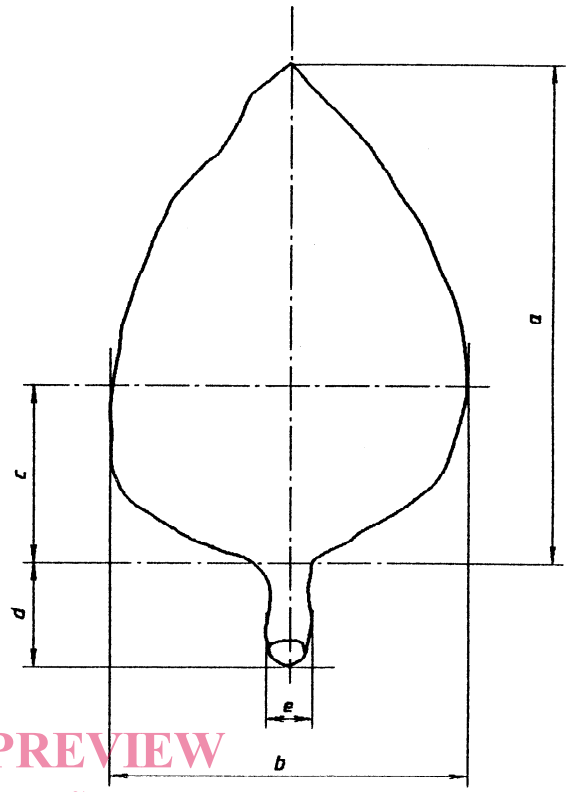

Figure 2 — Petiole leaf

This page intentionally left blank

This page intentionally left blank

UDC 663.97-416:620.115.8

Descriptors: tobacco, leaves, determination, shape, dimensions, dimensional measurements.

Price based on 3 pages