

ISO

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

ISO RECOMMENDATION R 520

CEREALS AND PULSES
DETERMINATION OF THE MASS OF 1000 GRAINS

1st EDITION
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BRIEF HISTORY

The ISO Recommendation R 520, *Cereals and Pulses — Determination of the Mass of 1000 Grains*, was drawn up by Technical Committee ISO/TC 34, *Agricultural Food Products*, the Secretariat of which is held by the Office Hongrois de Normalisation (MSZH).

Work on this question by the Technical Committee began in 1960 and led, in 1963, to the adoption of a Draft ISO Recommendation.

In December 1964, this Draft ISO Recommendation (No. 794) was circulated to all the ISO Member Bodies for enquiry. It was approved, subject to a few modifications of an editorial nature, by the following Member Bodies:

Argentina	Hungary	Romania
Australia	India	Spain
Canada	Israel	Switzerland
Chile	Korea, Rep. of	Turkey
Czechoslovakia	Netherlands	U.A.R.
France	New Zealand	United Kingdom
Germany	Poland	U.S.S.R.
Greece	Portugal	

No Member Body opposed the approval of the Draft.

The Draft ISO Recommendation was then submitted by correspondence to the ISO Council, which decided, in November 1966, to accept it as an ISO RECOMMENDATION.

CEREALS AND PULSES
DETERMINATION OF THE MASS OF 1000 GRAINS

1. SCOPE

1.1 This ISO Recommendation describes a method suitable for the determination of the mass of 1000 grains in cereals and pulses.

1.2 Field of application

This ISO Recommendation is applicable to the whole range of cereals and pulses with the exception of seed lots for sowing purposes.

2. DEFINITIONS

2.1 *Mass of 1000 grains as received.* Mass of 1000 grains including the moisture content at the time of the determination.

2.2 *Mass of 1000 grains on the dry basis.* Mass of 1000 grains corrected for the moisture content at the time of the determination.

3. PRINCIPLE OF METHOD

The grains are weighed first and counted afterwards.

4. APPARATUS

4.1 Dividing apparatus (if necessary).

4.2 Appropriate apparatus for counting grains (e.g. photoelectric counter). If suitable apparatus is not available, counting may be carried out by hand.

4.3 Analytical balance.

5. PROCEDURE

5.1 Determination of the mass of 1000 grains as received

Take at random an amount approximating to the mass of 500 grains from the sample as received and weigh to the nearest 0.01 g. Select the whole grains, weigh the residue and deduct this mass from the mass of the sample taken for the determination. Subsequently count the whole grains. Carry out tests in duplicate.

5.2 Determination of the mass of 1000 grains on the dry basis

If the mass of 1000 grains is to be referred to the dry basis, determine the moisture content of the whole grains free of impurities in a separate sample according to the routine method recommended.* This method, however, may be applied only to cereals. In the case of pulses, a method of drying at a temperature not higher than 105 °C should be used.

* See ISO Recommendation R . . . , *Cereals and Cereal Products — Determination of Moisture Content — (Routine Method)*, at present Draft ISO Recommendation No. 909.