

ISO

transbriee

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

ISO RECOMMENDATION R 1576

TEA

DETERMINATION OF WATER-SOLUBLE ASH
AND WATER-INSOLUBLE ASH

1st EDITION

August 1970

COPYRIGHT RESERVED

The copyright of ISO Recommendations and ISO Standards belongs to ISO Member Bodies. Reproduction of these documents, in any country, may be authorized therefore only by the national standards organization of that country, being a member of ISO.

For each individual country the only valid standard is the national standard of that country.

Printed in Switzerland

Also issued in French and Russian. Copies to be obtained through the national standards organizations.

BRIEF HISTORY

The ISO Recommendation R 1576, *Tea – Determination of water-soluble ash and water-insoluble ash*, was drawn up by Technical Committee ISO/TC 34, *Agricultural food products*, the Secretariat of which is held by the Magyar Szabványügyi Hivatal (MSZH).

Work on this question led to the adoption of Draft ISO Recommendation No. 1576, which was circulated to all the ISO Member Bodies for enquiry in July 1968. It was approved, subject to a few modifications of an editorial nature, by the following Member Bodies :

Australia	India	South Africa, Rep. of
Brazil	Iran	Spain
Ceylon	Israel	Thailand
Chile	Korea, Rep. of	Turkey
Colombia	Netherlands	U.A.R.
Czechoslovakia	Poland	United Kingdom
France	Portugal	U.S.A.
Hungary	Romania	U.S.S.R.

No Member Body opposed the approval of the Draft.

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

TEA

**DETERMINATION OF WATER-SOLUBLE ASH
AND WATER-INSOLUBLE ASH****1. SCOPE**

This ISO Recommendation describes a method for the determination of the water-soluble ash and the water-insoluble ash of tea.

2. DEFINITIONS

- 2.1 By *water-soluble ash* is meant the part of the total ash dissolved by water under the conditions specified.
- 2.2 By *water-insoluble ash* is meant the part of the total ash remaining after treatment with water under the conditions specified.

3. PRINCIPLE

Extraction of the total ash with hot water, filtration through ashless filter paper, ignition and weighing of the residue to determine the insoluble ash; calculation of the soluble ash by difference.

4. APPARATUS

Usual laboratory apparatus not otherwise specified, and the following items :

- 4.1 Dish, capacity 50 to 100 ml, used for the determination of total ash.
- 4.2 Furnace, regulated at 525 ± 25 °C.
- 4.3 Steam bath.
- 4.4 Filter paper, ashless.
- 4.5 Desiccator, containing an effective desiccant.
- 4.6 Analytical balance.

5. PROCEDURE**5.1 Test portion**

Use the total ash obtained from the determination described in ISO Recommendation R 1575, *Tea – Determination of total ash*.

5.2 Determination

- 5.2.1 Add 20 ml of distilled water (or water of at least equal purity) to the total ash in the dish (4.1), heat nearly to boiling and filter through the filter paper (4.4). Wash the dish and the filter paper with hot distilled water (or water of at least equal purity) until the volume of the combined filtrate and washings is about 60 ml. Return the filter and contents to the dish (4.1), evaporate the water carefully on the steam bath (4.3), and heat in the furnace (4.2) at 525 ± 25 °C until the ash is free from visible carbon particles. Cool in the desiccator (4.5) and weigh. Heat again in the furnace for 30 minutes, cool and weigh, and repeat these operations, if necessary, until the difference between two successive weighings is less than 0.001 g. Note the lowest mass.