



**American Society of
Agricultural and Biological Engineers**

**S
T
A
N
D
A
R
D**

ASABE is a professional and technical organization, of members worldwide, who are dedicated to advancement of engineering applicable to agricultural, food, and biological systems. ASABE Standards are consensus documents developed and adopted by the American Society of Agricultural and Biological Engineers to meet standardization needs within the scope of the Society; principally agricultural field equipment, farmstead equipment, structures, soil and water resource management, turf and landscape equipment, forest engineering, food and process engineering, electric power applications, plant and animal environment, and waste management.

NOTE: ASABE Standards, Engineering Practices, and Data are informational and advisory only. Their use by anyone engaged in industry or trade is entirely voluntary. The ASABE assumes no responsibility for results attributable to the application of ASABE Standards, Engineering Practices, and Data. Conformity does not ensure compliance with applicable ordinances, laws and regulations. Prospective users are responsible for protecting themselves against liability for infringement of patents.

ASABE Standards, Engineering Practices, and Data initially approved prior to the society name change in July of 2005 are designated as "ASAE", regardless of the revision approval date. Newly developed Standards, Engineering Practices and Data approved after July of 2005 are designated as "ASABE".

Standards designated as "ANSI" are American National Standards as are all ISO adoptions published by ASABE. Adoption as an American National Standard requires verification by ANSI that the requirements for due process, consensus, and other criteria for approval have been met by ASABE.

Consensus is established when, in the judgment of the ANSI Board of Standards Review, substantial agreement has been reached by directly and materially affected interests. Substantial agreement means much more than a simple majority, but not necessarily unanimity. Consensus requires that all views and objections be considered, and that a concerted effort be made toward their resolution.

CAUTION NOTICE: ASABE and ANSI standards may be revised or withdrawn at any time. Additionally, procedures of ASABE require that action be taken periodically to reaffirm, revise, or withdraw each standard.

Copyright American Society of Agricultural and Biological Engineers. All rights reserved.

ASABE, 2950 Niles Road, St. Joseph, MI 49085-9659, USA, phone 269-429-0300, fax 269-429-3852, hq@asabe.org

Moisture Measurement — Tobacco

Developed by the ASAE Special Crops Processing Committee; approved by Food and Process Engineering Institute Standards Committee; adopted by ASAE December 1987; reaffirmed December 1992, December 1997, February 2003, February 2008; revised editorially February 2008; reaffirmed December 2012; reaffirmed November 2017, revised by ASABE May 2018.

Keywords: Moisture, Tobacco

1 Purpose and scope

1.1 This Standard establishes a uniform method for determining the moisture content of tobacco lamina, midrib or stalk materials at various stages of growth, harvest or curing. These techniques should be used and referenced in all technical presentations where moisture content determination is a factor. Deviation from these methods should be reported.

1.2 Specifying sampling procedures is not within the scope of this Standard. It is assumed that representative samples are collected for analysis.

2 Apparatus

2.1 Sample containers. Sample containers shall be made of screen wire with a cross section of 5 × 20 cm and a height of about 15 cm. The bottoms of the containers shall be made of heavy-gauge sheet metal firmly attached to the screen wire to provide a rigid base. A suitable sheet metal or screen wire cover shall be used to prevent loss of light pieces of lamina during drying.

2.2 Oven. The drying oven shall be of the forced draft type, properly ventilated and having temperature and uniformity specifications equal or better than $\pm 2^{\circ}\text{C}$ in the range of 100 to 110°C.

2.3 Balance. A balance with a sensitivity of 0.01 g or better shall be used. Calibration or zeroing of the balance should be repeated frequently during use to assure accuracy.

3 Preparation of sample

3.1 Separate tobacco into lamina, midrib and stalk portions, being careful to remove any foreign material.

3.2 Chop or slice lamina, midrib and stalk portions to produce small pieces having the largest dimension no greater than 5 cm and the smallest, no less than 1 cm, other than thickness. Fines shall not exceed 10% of sample weight.

4 Procedure

4.1 Preheat oven to $101 \pm 2^{\circ}\text{C}$.

4.2 Weigh the sample container (tare weight).