Designation: D2944 – 14

Standard Practice of Sampling Processed Peat Materials [1]

This standard is issued under the fixed designation D2944; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ε) indicates an editorial change since the last revision or reapproval.

1. Scope*

1.1 This practice the covers procedure for obtaining samples for use in the determination of moisture, ash, and organic matter; volume; pH; volume weights, water-holding capacity, and air capacity of water-saturated peat materials; total nitrogen; particle size range; and sand content of processed peat materials. This procedure is valid for sampling peat materials for horticultural purposes and produces a sample that is representative of a material.

1.2 The values stated in SI units are to be regarded as the standard. The inch-pound units in parentheses are for information only.

1.3 *This practice offers a set of instructions for performing one or more specific operations. This document cannot replace education or experience and should be used in conjunction with professional judgment. Not all aspects of this practice may be applicable in all circumstances. This ASTM standard is not intended to represent or replace the standard of care by which the adequacy of a given professional service must be judged, nor should this document be applied without consideration of a project's many unique aspects. The word "Standard" in the title of this document means only that the document has been approved though the ASTM consensus process.*

1.4 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.*

2. Referenced Documents

2.1 *ASTM Standards:*[2]

D653 Terminology Relating to Soil, Rock, and Contained Fluids

D3740 Practice for Minimum Requirements for Agencies Engaged in Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction

3. Terminology

3.1 *Definitions:*

3.1.1 For definitions of common technical terms used in this practice, refer to Terminology D653.

4. Significance and Use

4.1 This practice provides a uniform procedure for obtaining representative samples when obtained from multiple sources. It provides a sample that is more representative of a product that may be heterogeneous in nature. Producing a representative sample of a material is central to the validity of results any testing/analytical procedure.

NOTE 1—The quality of the result produced by this standard is dependent on the competence of the personnel performing it, and the suitability of the equipment and facilities used. Agencies that meet the criteria of Practice D3740 are generally considered capable of competent and objective testing/sampling/inspection/etc. Users of this standard are cautioned that compliance with Practice D3740 does not in itself assure reliable results. Reliable results depend on many factors; Practice D3740 provides a means of evaluating some of those factors.

5. Apparatus

5.1 *Slotted Tube Corer*—A single or double tube, with holes (slots) along the length, pointed end, and a minimum 25-mm (1-in.) inside diameter.

5.2 *Sample Splitter.*

5.3 *Oil Cloth.*

5.4 *Sample Containers*—A glass or equivalent inert container with enough capacity to hold the type and size of sample obtained and be hermetically sealed.

6. Procedure

6.1 Take a representative sample from the lot or shipment with a slotted tube corer as follows:

6.1.1 *Packaged or Baled Peats*—Lay the bag or bale horizontally and remove the core diagonally from end to end. Determine the number of cores as follows: from 1 – 4 bags, sample all bags, take at least 1 core from each bag for a total of at least 5 cores; from lots of 5 to 10 bags, sample all bags,

[1] This practice is under the jurisdiction of ASTM Committee D18 on Soil and Rock and is the direct responsibility of Subcommittee D18.22 on Soil as a Medium for Plant Growth.

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[2] For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

***A Summary of Changes section appears at the end of this standard**

take 1 core from each bag; from lots of 11 or more, sample 10 bags, take 1 core from each bag sampled.

6.1.2 *Bulk Samples*—Draw at least 10 cores from different regions.

6.1.3 *Small Containers* (4.5 kg (10 lb) or less)—Using all of the contents of a small container and, working rapidly to prevent moisture losses, reduce the composite sample to not less than 500 g by mass or 2 L by volume by mixing on a clean oilcloth or paper and quartering with a sample splitter. Place the sample in an airtight container.

6.2 Sampling by random "grab" procedure is necessary if the particle size range is to be determined or if representative sample cannot be taken with a core sampler. Individual samples should not be less than 500 g by mass or 2 L by volume.

6.3 Using an indelible marker, mark each sample with site identification, analyses required, sampling personnel, time, and date.

6.4 Preserve the as-received moisture content of the sample using the airtight sample containers.

7. Keywords

7.1 ash; organic matter; peat; samples; sampling

SUMMARY OF CHANGES

Committee D18 has identified the location of selected changes to this standard since the last issue (D2944 – 13) that may impact the use of this standard. (November 1, 2014)

(1) Changes made throughout to clarify the uses of the different test methods contained in this standard.