**ASAE S341.6 MAR2024**
**Procedure for Measuring Distribution Uniformity and Calibrating Small Granular Broadcast Applicators**

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# Procedure for Measuring Distribution Uniformity and Calibrating of Small Granular Broadcast Applicators

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**Keywords:** Applicators, Distribution, Granular, Spreaders, Test

## 1 Purpose and Scope

**1.1 Purpose.** The purpose of this Standard is to establish a uniform method of determining and reporting performance data on broadcast spreaders designed to surface apply granular materials for 18.3 m (60') spread width or less. Tests performed according to this Standard make it possible to predict distribution uniformity of a broadcast spreader and to compare spreader distribution patterns.

**1.2 Scope.** This Standard pertains to centrifugal, pendulum, and other types of broadcast spreaders designed for dry granular application while operating on the soil surface. Portions of the test procedures outlined herein are suitable for determining the delivery rate of gravity or drop spreaders; however, additional tests not covered in this Standard are needed to completely evaluate the performance of gravity spreaders. This Standard does not cover dry pneumatic granular applicators or large broadcast spreaders that are used to surface apply granular materials for 18.3 m (60') spread width or more.

## 2 Normative References

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies unless noted. For undated references, the latest approved edition of the referenced document (including any amendments) applies.

ASTM E11, *Standard specification for woven wire test sieve cloth and test sieves*

ASAE S281, *Capacity Designation for Fertilizer Pesticide Hoppers and Containers*

ASAE S327, *Terminology and Definitions for Application of Crop or Forestry Production and Protection Agents*

ASABE S660*, Procedure for Evaluating the Distribution Uniformity of Large Granular Broadcast Applicators*

## 3 Definitions

**3.1 application, one-direction:** An application method in which successive adjacent swaths are made in the same direction of travel (racetrack or circuitous application). This method produces a right-on-left overlapping of adjacent patterns.

  