

## OREGON STATE UNIVERSITY SEED LABORATORY

### DESCRIPTION OF THE MOST COMMON GRASS SEED PURITY TESTS

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In today's market of quality conscious seed suppliers and buyers, there is a need to know what information is generated by various purity tests. This document explains the value of each test, and the table below compares the most common exams used in grass seed testing. This information will help customers to select the proper test, or combination of tests, based on their needs.

**STANDARD PURITY TEST (P)**: This test determines the percentage by weight of **pure seed, other crop seeds, inert matter and weed seeds** in a test sample. The minimum sample size of any species is 2,500 seeds (See the AOSA Rules for Testing Seeds for more details). This test can be conducted on commercial, certified, official and other samples.

**NOXIOUS WEED SEED EXAM (NOX)**: This test reports the name and number of any noxious weed seeds found in a test sample (a minimum of 25,000 seeds, 10 times the size of a purity test) based on the 'Federal' '**all states noxious weed seed exam**'. Noxious weed exam for a particular state can be performed as well. Test does not report other seeds that are not in the noxious list. When a customer orders purity test (P), the OSU seed laboratory tests and reports both the purity and the noxious results, which are *required by the Oregon Certification Program*.

**CROP AND WEED EXAM (CW)**: This exam provides a complete listing of **all species (crops and weeds)** found in a test sample and categorizes the seeds as to crop seeds or weed seeds. The test sample size is equivalent to the noxious weed seed exam. Both the actual number of seeds found in a test sample (e.g., 1 seed in 50g) and rate of occurrence (number of seeds per pound '9 seeds/lb') are reported. Because CW test provides complete listing of all the seeds found in a test sample, Oregon Sod Quality (SQ) and undesirable grass seeds (UGS) reports can be generate without testing the sample again. This saves money and time for the customers. When customers order a CW with the initial purity test, the lab can revise the C&W report to SQ or UGS on a short notice, which gives the customer flexibility to respond to market opportunities. This test is conducted on commercial, certified, official or other samples.

**OREGON SOD QUALITY (SQ)**: This test is conducted on Oregon Certification eligible samples **only**. *Experimental varieties are not eligible for Sod Quality tagging*. Sod quality tests are not standardized throughout the USA. Different states may have different SOD test requirements. The Oregon sod quality program is managed by the Oregon Department of Agriculture and requires that the certification eligible sample should pass three parts: 1) Purity and noxious exam, 2) Exam for sod listed species (see table below), and 3) Viability test (germination or TZ).

**UNDESIRABLE GRASS SEEDS (UGS)**: The "UGS" test is an examination for 10 species (see table) deemed to be undesirable in turf seed in six eastern states. When marketing turf varieties into the listed states, the seed label must list the name and number per pound or ounce of UGS species found in a test sample under the heading "Noxious Weed Seed" or "Undesirable Grass Seed." For more specific information, the state seed laws should be reviewed. This test can be conducted on commercial, certified or official samples.