

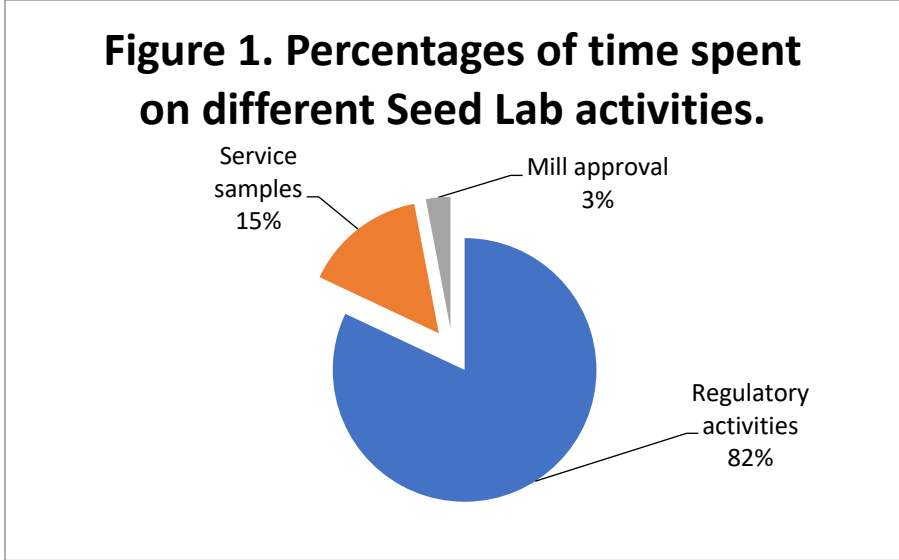
**California Department of Food and Agriculture
Plant Pest Diagnostics Branch
Seed Laboratory**

**Report of Activities
July 1, 2018-March 31, 2019**

Summary. Seed regulations compliance accounted for the majority of the Seed Lab's (SL) activities for the first three quarters of FY18-19. Activities related to regulatory compliance included: testing samples collected by the Seed Services program for label compliance; seed identification in support of CA border stations, counties, other regulatory labs and crop improvement associations; noxious weed seed exams for state and county quarantine purposes and phytosanitary certification; validation of existing seed testing rules, and development of new/modified standardized rules favorable to CA's seed industry; and providing investigative, consulting and training services to other regulatory institutions, the seed industry and individual seed analysts. Other SL activities included: a) service seed testing for individual seed producers, seed companies, and consultants; b) seed identification services for seed companies and other private seed testing labs; c) feed mill certification testing; and d) research and development activities.

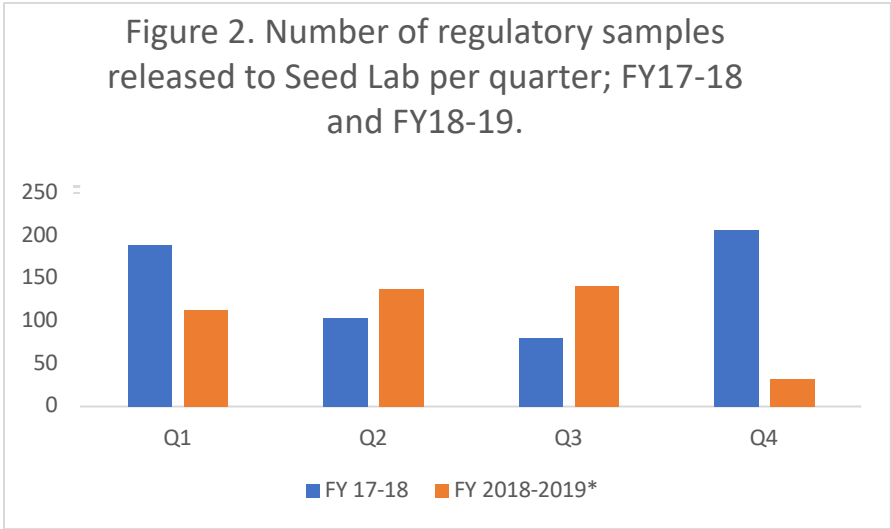
I. Seed Regulatory Compliance Activities; First three quarters, FY18-19

Regulatory compliance was the main SL activity, and accounted for most of the work performed by SL staff members. Compared to other functions, 82% of the time of SL staff was spent on regulatory activities (Fig. 1). Approximately 65% of that time was devoted to label compliance testing; 9% on providing consultations and information services related to seed testing and performance issues, and provision of investigative services; 10% on validation of existing Rules governing regulatory testing, and development of new/modified seed testing Rules for regulatory purposes and in support of CA's seed industry; 5% on monitoring and inspection activities within the broad regulatory framework (seed identification of CA border stations submissions, solicited testing by counties, other regulatory labs and crop improvement associations, noxious weed seed exams for state and county quarantine purposes); 8% on training analysts on applications of test methods to enhance uniform and standardized testing for regulatory and labelling purposes, as well as development of guidelines to seed testing methods; and 3% on development and dissemination of seed testing protocols and procedures not covered by existing Federal and California seed laws.



II. Label Compliance Testing; First three quarters, FY18-19

For Q1-Q3, FY18-19, 392 out of 600 regulatory samples were released to the Seed Lab by the end of March, 2019, with more than 40 additional samples already submitted in Q4 (Fig. 2). Vegetable seeds represented around 47% of all submitted samples, followed by grass seeds (30%) and agricultural seeds (23%).



*FY 2018-2019: Q4 submissions will be completed by end of June, 2019.

III. Label violations-Seed Regulatory Compliance Testing; First three quarters, FY18-19

The type and number of violations detected by the SL are listed in Table 1. Several seed lots had multiple violations. The relative number of violations (total violations as a proportion of number of samples tested) for the first three quarters of FY18-19 was 11.1%, similar to the proportion found in the previous FY (10.6%).

Table 1. Type and number of seed lot label violations based on SL testing, FY19-19TD, compared to the two previous FYs.

Violation type	FY16-17	FY17-18	FY18-19TD
Mislabeled kind or kind and variety	10	12	5
% Pure seed out of tolerance	49	18	18
% Inert matter out of tolerance	15	12	16
% other crop seed out of tolerance	9	5	4
% Weed seed out of tolerance	3	3	1
Noxious weed seed out of tolerance	2	1	0
% Germination and/or hard seed out of tolerance	37	13	4
Total	125	64	48

IV. Service Samples

Number of tested service samples for this fiscal year is expected to significantly exceed that of the previous FY. The total number of service samples tested in the first three quarters of FY18-19 (344) was roughly equal to the number of samples tested in all of FY17-18, and most of this increase was due to a higher number of rice samples submitted to the SL.

V. Feed Mill Inspection Samples

By the end of the Q3, FY18-19, the SL had received and inspected 48 feed mill samples, less than half the number (152) received in the previous FY. The submitted samples were of two types: (1) pre-processing samples to be inspected only for noxious weed seeds, and (2) post-devitalization processing samples to be checked for viable weed seeds. A number of pre-processing samples contained seeds of one or more species of noxious weeds such as common russianthistle, spineless russianthistle, field bindweed, giant ragweed, jointed goatgrass and Johnsongrass. Out of 45 Post-processing samples, 14 contained viable weed seeds.

VI. Other Services to the Seed Industry

- Deborah Meyer continues to serve as AOSA co-chair of the Purity Testing Committee, member of the Teaching and Training Committee, and member of the RST/CSA Exam committee. Riad Baalbaki continues to serve as AOSA co-chair of the Germination and Dormancy Committee and member of both Statistics and Seed Moisture Committees. Robert Price continues to serve as member of the Referee Testing Committee, and is on the Planning Committee for the 2019 AOSA/SCST annual meetings.
- The Seed Lab staff continues to be very active in developing AOSA Rules change proposals submitted for consideration to AOSA/SCST. Rules change proposals introduce new testing methods or revise existing ones, aiming to improve seed testing practices both nationally and internationally. This year, Seed Lab staff authored or co-authored around 80% of all submitted proposals to AOSA/SCST, 23 out of a total of 29. Deborah Meyer was involved in 18 proposals, mainly dealing with purity testing, and Riad Baalbaki was involved in 5 proposals related to viability, tolerances and seed counts. All proposals will be voted on for adoption into AOSA Rules at the 2019 AOSA/SCST annual meetings.
- Robert Price is collaborating with the USDA on a seed ID project for port identifiers.
- Deborah Meyer is collaborating with staff at the Seed Science and Technology Laboratory-Canadian Food Inspection Agency, on developing the seed identification website of the International Seed Morphology Association (ISMA).
- Deborah Meyer continues to serve as a member of ISTA's Purity Committee, and as a member of the National Seed Health Systems Policy and Procedures advisory board.