

September 4, 2019 Board Update

Plant Industry Division



Division Overview

- Pending matters of significance
 - Crops
 - An emergency NAC to 557 has been submitted to the Governor to address hemp and marijuana cross pollination issues that pose an economic and federal compliance issue to the industry. The proposed NAC would allow NDA to deny or revoke certification if a pollination issue is present that could impact proximal growers.
 - SB347 passed, modifying NRS 557 to align with provisions under the 2018 Farm Bill (FB). The FB established more stringent THC testing requirement which is anticipated to impact the industry.
 - Two arrests by Nye County Sheriff's Department have occurred due to unregistered Cannabis grows. Both individuals were certified hemp growers at different locations than where the illegal cannabis was being produced. NDA is taking action to revoke hemp certification due to failure to comply with NRS 557.280 and ongoing drug-related prosecution charges.
 - Pesticides
 - Oregon and Pennsylvania reported a neem oil pesticide issue where active ingredients were present that were not listed on the product label. This issue was also identified in Nevada with fifteen market samples testing positive for unlisted active ingredients, though at very small levels in concentrated pesticides. NDA is collaborating with EPA and the National Organics Program to determine whether this mislabeling issue could impact cannabis or organic product status in Nevada.
 - Licensing of landscape companies conducting pest control are required to comply with licensing and testing requirements under NRS 555.277 as amended by AB-32 (2017). Part of the exam is reviewing and understanding the product label, however this has presented a language barrier issue since not all EPA labels are available in Spanish. NDA is continuing to work with industry to identify potential solutions.
- Partnership activities
 - Crops
 - Nevada State Health Division
 - SB209 was passed in response to mislabeled CBD products frequenting the market, requiring NDA and State Health to adopt testing and labeling requirements for products containing CBD. NDA has been collaborating with the Nevada State Health Division in adopting regulations that provide ingredient labeling verification to consumers involving CBD hemp products.
 - Natural resources
 - Nevada Department of Transportation (NDOT)

- NDOT has partnered with the NDA to improve state-wide weed mitigation strategies along Nevada highways, since vehicles are a significant contributor to the spread of noxious weeds. NDOT is providing funding, \$95,500 annually for ten years, to support an NDA noxious weed position to coordinate and oversee weed mitigation projects for Nevada highway construction projects.
- Cooperative Weed Management Associations (CWMAs)
 - Noxious weeds staff collaborate with conservation districts in establishing CWMA across the state which allows for collective weed management strategies on a county and state level to be implemented. These partnerships benefit the range and farm lands surrounding Orovada, Paradise Valley, and Carson Valley. Additional local weed management partnerships are anticipated through the newly formed Washoe Storey CWMA and Pershing County CWMAs, who have taken additional steps to become established which will allow them to apply for federal funding to conduct noxious weed control in the future.
- Bureau of Land Management (BLM)
 - Historically, much of the seed used for restoration work comes from outside the state due to limited state supply. Nevada is working to address this issue through expanding their program and establishing agency collaborations. Forty-six native seed source identification inspections were conducted, to support restoration efforts and verify that the native seeds collected are in fact the desired species. This program was initiated in March of 2019. A \$50,000 BLM grant was awarded to further support inspection services for this program in addition to building a Nevada seed bank.
- Tribal Council of Nevada
 - To ensure noxious weeds are controlled on sovereign tribal lands, a presentation was provided to tribal natural resource managers. The presentation covered identification, control methods, and collaboration opportunities through shared mapping or on-site trainings. Such activities will help to initiate noxious weed treatment strategies that align with tribal priorities and state laws.
- North American Invasive Species Management Association (NAISMA)
 - NAISMA has developed a committee to edit their bylaws and articles to include compost as a possible new item to be certified as “weed free”. If compost is approved for certification this will add an additional weed free product which in turn will help further prevent the spread of noxious weed seeds on federal land projects.
- Nevada Native Seed Partnership
 - An increasing demand of native seed is present due to wildland fires and the encroachment of invasive species. In recognition the “Nevada

Native Seed Partnership” was developed to build a sustainable native/wildland seed program in Nevada that establishes a local market of native plants that can be used for restoration projects. Monthly meetings have been held to further strategies in increasing Nevada produced native seed.

- University of Nevada Reno
 - The seed certification program developed joint publications with the University of Nevada Cooperative Extension (UNCE) which are near completion. These publications have been developed to help clarify certain aspects of the seed production industry and promote alternative crop production. There are 3 publications being reviewed including “How to Grow Certified Seed,” “Buying Seed: Understanding Seed Tags,” and “Wildland Seed Collections: The Certification Process”
- Quarantine
 - Western Plant Diagnostic Network (WPDN)
 - Plant pathology is working with the WPDN to obtain a Laboratory Information Management System (LIMS) in order to improve and expedite data information sharing and data management. This will initiate rapid communication to other labs and customers involving plant pathogen identification of industry significance allowing for targeted surveying and appropriate action to be taken.

Program Updates

- Crops
 - Significant growth has been experienced in the hemp program (see hemp program data below). Over 600 hemp samples (from August-November) are anticipated to be analyzed by NDA’s chemistry lab for THC concentrations, which determines state and federal crop compliance. Crop analysis is time-sensitive since a failed test would require a resample and THC concentrations typically increase as the crop matures. New equipment, standard operating procedures, and drying procedures have been adopted to expedite sample analysis (approximately 10-day sample turnaround).

	Growers	Producers	Handlers	Acres	Indoor Sq Ft
2017	26	0	0	490	17,170
2018	116	16	47	1880	235,688
2019 (YTD)	196	44	48	13,600	1,372,243

- NDA crop sampling procedures have been revised for 2019/2020 to represent multiple uses of the plant (stem, flower and leaf) which is anticipated to provide a testing buffer advantageous to Nevada hemp growers.

- Quarantine
 - The Plant Pathology Program has completed a total of 5,910 survey records generated from field surveys, sampling, and extensive lab testing. The documentation of these valuable data support trade and export certification of agricultural commodities produced in Nevada.
 - The plant pathologist and lab staff are continuing to investigate the cause of abnormal hemp growth (leaf curling, yellowing, stunting, and severe witches' broom) on hemp farms. The disease is new to hemp crops and the cause(s) is poorly understood, even though Phytoplasma bacteria has been found in some symptomatic plants. This information is being shared with state partners to build awareness and encourage further research. 11 growers have submitted samples to date and field staff are identifying witches' broom routinely when performing sampling. Some growers have reported 40-100% varietal crop loss to this.
 - A Red Imported Fire Ant (RIFA) detection gap was identified in Riverside County, CA. Palms are a host plant for RIFA, however they are not always sourced from a certified nursery, which can lead to them entering Las Vegas undetected. Shipments typically end up at landscape or housing development grounds. NDA is collaborating with California Department of Food and Agriculture (CDFA) and Arizona Department of Agriculture to establish improved surveying of California palms. CDFA will be working with counties of concern to improve detection strategies through revenue generated through the CA gas tax. Nevada will continue to provide and expand RIFA outreach strategies to landscapers and housing developments.
 - Three white rot garlic field infestations were identified with 10 acres contaminated and 2,000 acres quarantined. Topaz allium fields are of concern since this area is a reoccurring location for white rot detection. White rot is incredibly contagious and remains viable in the soil for decades. When left undetected it can be detrimental to the allium industry.
 - An increase in white rot inspections for onions was experienced with 4,701 acres surveyed. No white rot was detected, however ongoing issues with pink root and Botrytis were observed.

- Pesticide
 - EPA delegates the primary responsibility of implementing the Certification of Pesticide Applicator's Rule (40 CFR171) to individual states to ensure applicators are applying pesticides per the label and in a manner that protects public and environmental health. This process ensures national consistency and minimum standards while providing flexibility to states in implementing rules. NDA will be required to update NRS and NAC to reflect EPA's changes.
 - Agricultural water wells are often shallower than drinking water wells and become an early warning system for pollution. To date, 105 total samples including 14 surface water samples of the Humboldt River have been taken with no detected pesticide pollution (of the 72 pesticides of concern evaluated).

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- Natural Resources
 - Seed certification staff have inspected twenty-four (24) fields for seed certification in alfalfa, wheat, rye, barley, oats, triticale, and potato. These inspections ensure seed viability and that seed products are not infested with noxious weed seeds or other pests.
 - Seventeen (17) industrial hemp seed producer inspections were performed to assess and catalogue genetic purity and to confirm the site reflects activities reported on the seed producer application. Genetic purity status observed in 2019 will be used in 2020 when hemp applications are evaluated and seed suppliers are listed.
 - Through the voluntary “Certified Weed Free” program, 12 Weed free forage and 8 gravel inspections were performed to mitigate the spread of noxious weed seeds through common channels such as highway construction projects, post fire restoration, or livestock feeding.

Industry Impact

- Three white rot garlic field infestations (two in Topaz, one in Yerington) were identified with 10 acres contaminated and 2,000 acres quarantined. White rot is incredibly contagious and remains viable in the soil for decades. When left undetected it can be detrimental to the allium industry and spread through Nevada’s allium seed market. Topaz allium fields are of concern since four seed product fields over the past 5 years have been detected, impacting 290 seed production acres. Topaz is a seed production region and there is a concern that this will contribute to the spread of the disease to other production areas. With the increasing level of contamination on site, the area may likely be withdrawn for production by the current seed contractor.