



November 7, 2025

Dr. Karen Morrison, Director
California Department of Pesticide Regulation
1001 I St.
Sacramento, CA 95814
<https://cdpr.commentinput.com/?id=JsSRaG6NA>

Re: Anticoagulant Rodenticide Mitigation Informal Public Comments

Dear Dr. Morrison,

On behalf of the Western Plant Health Association (WPH), I am submitting the following comments regarding DPR's Anticoagulant rodenticide (AR) mitigation regulatory concepts. WPH appreciates the opportunity to comment on the proposed rule changes regarding rodent management, including ARs that were identified at your September 24, 2025, webinar. WPH represents pesticide and fertilizer manufacturers, agricultural biotechnology providers, and agricultural retailers in California, Arizona, and Hawaii.

WPH's comments reflect our concerns on how additional restrictions on AR-use within California's agricultural and urban use sectors could impact the control of rodent pests. WPH recognizes DPR's intent to appropriately balance the protection of public health, property, and food supplies from rodent pests with the need to manage potential risks to non-target species. However, additional restrictions would further reduce effective responses to rodent infestations—resulting in profound consequences for public health, food security, and property protection, without increasing protections to non-target species.

Risks Posed by Additional Restrictions

Rodents pose serious hazards to public health, property, food/agribusiness, and infrastructure. According to the United States Environmental Protection Agency (EPA), each year rodents cause severe damage to property, infrastructure, crops, and food supplies across the U.S., in addition to spreading diseases [1]. In food processing and storage facilities, rodents are recognized as “public enemy No. 1” due to contamination risk, pathogen spread, and the potential for facility shutdowns [2]. In addition to the health risks, rodent infestations also pose economic risks, including contamination and destruction of stored commodities [3].

These facts underscore why robust rodent-control tools matter. Any diminution of those tools increases the risk of rodent-driven harm to health, food, and property. ARs remain an essential component of integrated rodent management – restricting them further would reduce available tools to control rodent infestations.

ARs have long been a mainstay of professional rodent control because of their broad efficacy, delayed action, which helps avoid bait-shyness, and proven history of success. First-generation anticoagulants (FGAR) and second-generation anticoagulants (SGAR) were developed because of the need for effective control of commensal rodent pests [4][5].

Professional pest-control operations and integrated pest management plans include chemical control, physical exclusion, sanitation, monitoring, trapping, and habitat modification. Over-restricting chemical options would force heavier reliance on less effective or slower methods — which may not suffice in high-infestation or high-risk settings, such as in agriculture, food processing and storage, or urban infrastructure. The proposed DPR rule would appropriately retain the availability of ARs under professional supervision and ensure continued efficacy while maintaining responsibility and safeguards.

Rodenticide resistance driven by fewer available tools is a real and growing concern. It has been demonstrated that the fewer AR options that are available, the likelihood that an accelerated threat of uncontrollable infestations will occur. Genetic resistance demonstrated in studies documenting mutations in the gene *Vkorc1* in commensal rodents that confer resistance [6][7], because of restrictions of safe and efficacious ARs in rodent populations.

If regulatory policy further restricts available chemical active ingredients or formulations, the remaining tools will face increased selection pressure and higher likelihood of failure due to resistance. Maintaining a broad array of chemical and non-chemical control options is a critical strategy to delay and manage resistance development.

Unintended Consequences from Restrictions to Anticoagulant Rodenticides

Fewer chemical options mean longer infestation durations, greater rodent reproduction, increased structural damage (gnawing wires, insulation, pipes), greater destruction of crops, contamination of food and feed, and increased disease-transmission risk to workers. In a California Department of Food and Agriculture survey conducted just this year, estimates for damages from rodent infestations in the Central Valley are estimated to be over \$300,000.00 [8]. From a public-health perspective, rodent-borne diseases such as leptospirosis, hantavirus, rat-bite fever, and others are very real [1][9]. Rodents can quickly contaminate or destroy significant portions of food supplies and expose agricultural workers and communities to contagious diseases [2][3].

In states or locales where chemical controls have been restricted, reports suggest increased rodent sightings, increased damage claims, increased property loss, and increased costs for pest-control service providers. If professional rodent control becomes less effective or more costly because fewer chemical tools are available, or only non-chemical options remain, then the burden of infestations will disproportionately fall on municipalities, food processors, warehouses, farms, and other critical-infrastructure sectors. This will lead to higher containment costs, longer remedial periods, potential shutdowns, and increased public-health risk.

Viability of Eliminating Anticoagulant Rodenticides

WPH recognizes and respects the concerns of wildlife advocates regarding non-target exposures and secondary-poisoning risks from ARs. However, we believe a policy goal of eliminating chemical-based rodenticides entirely or reducing them to near-zero is unrealistic from a practical viewpoint. Rodents reproduce quickly, adapt to habitat changes, exploit human-altered environments, penetrate excluded spaces, and when unchecked, will reach population densities which non-chemical measures alone cannot achieve reasonable levels of control.

WPH appreciates DPRs inclusion of ARs and not adopting a policy that mandates only non-chemical rodent-control strategies (e.g., traps, exclusion, habitat modification). Failure to preserve chemical options will inevitably lead to recurrent or chronic infestations, higher baseline rodent populations, increased disease vector risk, higher contamination events, and higher costs borne by government, business and the public. These outcomes are exactly the unintended consequences California must avoid. The best approach is not elimination of ARs, but rather responsible, targeted use of them as part of an integrated pest-management (IPM) framework — something the proposed DPR regulations support.

Recommendations

WPH believes DPRs proposal overall reflects a balanced regulatory strategy for California's agricultural and urban communities. However, WPH asks that DPR consider additional language to address the overwhelming infestations that are occurring and continue to refrain from adding further restrictions on anticoagulant rodenticides, uses, or formulations. WPH requests DPR consider the following recommendations:

- WPH supports DPR emphasizing IPM, monitoring, stewardship, resistance-management, and preservation of chemical-based rodenticide options.
- WPH appreciates and supports the continued agricultural exemption for FGAR use in outdoor settings. However, we believe that the agricultural exemption should include the

potential use of FGARs and SGARs in both indoor and outdoor settings when severe infestation is occurring. Food stocks and risks to worker health in both settings require that these locations be fully protected, including the use of FGARs and SGARs in emergency infestation settings.

- WPH requests clarification on application periods for ARs per the proposal. The current proposal limits use to 35 days consecutively, and a 105-day total use period for the year when used in indoor settings.
 - The draft is unclear as to whether the second 35-day AR use period can begin immediately upon conclusion of the first use period or if there is a mandatory suspension of use after a 35-day use period.
 - We recommend that in areas where infestations are designated as severe by Agricultural Commissioners, emergency use beyond a 35-day periods be considered appropriate to control infestations, provided the user has developed a comprehensive IPM rodent management plan as required by DPR via these regulations.
 - WPH also recommends that DPR provide additional emergency use of ARs beyond the 105-day total annual use period if severe infestation conditions return during an annual period. Emergency use extensions would be based on users having demonstrated through their rodent management plan that they have engaged in a comprehensive IPM program, utilizing an approved rodent management plan, monitoring, and designation by an Agricultural Commissioner as an emergency use situation.
 - We ask that DPR provide the scientific findings that these times limitations are based on. They appear to be somewhat arbitrary as proposed, and we are concerned that the limits may result in less than efficacious applications, contributing to rodent resistance to chemical controls, and continuing long-term severe infestations.
- Require or encourage applicators and professional users to adopt resistance-management protocols, e.g., rotation of active ingredients when practical, monitoring rodent-population responses, documenting efficacy, and switching modes of action when necessary. This will enhance the efficacious longevity of ARs.
- Allow farmers, applicators, and professional users to maintain rodent management plans on-site either electronically or hard copy. This will allow users who do not currently have access to electronic technology the ability to document their rodent management plan. Hard-copy written information may also allow users the ability to provide workers with clear information on where and how rodenticides may be utilized.

- Emphasize the importance of integrated pest-management (IPM) in rodent control programs (including sanitation, exclusion, engineering controls, bait-stations, monitoring, trained applicators), affirming that ARs are one component rather than the sole solution.
- Encourage data collection and mapping of rodenticide-resistance in California's rodent populations (commensal rats/mice) so that DPR, applicators and manufacturers can track emerging resistance and adjust practices proactively.
- When non-chemical alternatives are proposed or required, ensure that they demonstrate equivalent efficacy under real-world conditions before phasing down chemical tools. A premature elimination of chemical options before adequate non-chemical substitutes are scalable will continue the problem of unmanageable pest populations.
- Encourage continued education of pest-management professionals, structural engineers, food-process facility operators, and municipalities about the risks of rodent infestations (disease, infrastructure damage, food loss) and the importance of preserving an effective spectrum of rodent-control options.

Conclusion

WPH opposes the further restriction of anticoagulant rodenticides at this time, based upon the significant hazards posed by rodents, the documented emergence of resistance, the need to maintain multiple chemical modes of action, and the real risk of unintended consequences from over-restrictive policy. WPH acknowledges the positive aspects of DPR's proposed rule changes regarding rodenticide regulations but ask DPR consider our additional suggestions. We thank you for your consideration of our comments and look forward to working with DPR on this issue moving forward. If you have any questions regarding our comments, please feel free to contact me.

Sincerely,



Renee Pinel
President/CEO

References

1. *United States Environmental Protection Agency*. “About Rats and Mice – Why Be Concerned.” Available at: EPA. [accessed 2025] – “Each year, rodents cause significant damage to property, crops, and food supplies ... and they may also spread diseases.” (US EPA, “About Rats and Mice.”)
2. *Quality Assurance Magazine*. “The Risks of Rodents in Food Facilities.” July 12, 2024. “If auditing agencies detect any rodent fecal matter, urine or signs of rodent presence, they can stop production, and that is extremely costly.”
3. *IFSQN (International Food Safety & Quality Network)*. “How Rodents are Threatening Your Food Safety Procedures.” August 5, 2019. “Twenty percent of the world’s food supply is believed to be contaminated by rodents.”
4. McGee, C.F., McGilloway, D.A., & Buckle, A.P. (2020). “Anticoagulant Rodenticides and Resistance Development in Rodent Pest Species – A Comprehensive Review.” *Journal of Stored Products Research*.
5. *Pest Management Science / PMC*. “Anticoagulant rodenticide blood-clotting dose-responses and resistance factors in house mice.” (2022)
6. *Scientific Reports*. “VKORC1-based resistance to anticoagulant rodenticides and emerging target sites in rodent populations.” (2023)
7. *PMC/NCBI*. “Investigation of anticoagulant rodenticide resistance induced by single nucleotide polymorphism (SNPs) in commensal rodents.” (2022)
8. *Rat Damage in Almond Orchards*. Rachael E. Goodhue, University of California, Davis, Kevi Mace-Hill and Samuel Raburn, California Department of Food and Agriculture
9. *National Park Service notes*: <https://www.nps.gov/articles/000/rodent-borne-diseases.htm>