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Comments on EPA's Draft Guidance for Pesticide Registrants on the List of Pests of Significant Public Health Importance

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To Whom It May Concern:

The Arizona Pest Management Center is host to the University of Arizona's expert integrated pest management (IPM) scientists including Ph.D. entomologists, weed scientists and plant pathologists with expertise in the strategic tactical use of pesticides within IPM programs that protect economic, environmental and human health interests of stakeholders and the society at large. In coordination with the Western Integrated Pest Management Center, we contribute to federal comments on issues of pest management importance to stakeholders throughout the desert southwest including Arizona, New Mexico, Nevada, Colorado and the southeast desert regions of California.

At this time, we wish to respond to the EPA's request for stakeholder input on "Draft List of Pests of Significant Public Health Importance—Revised 2020." (Referred to throughout as "The List").

Organization of these comments: We use headers to identify each topic or aspect of The List, followed by corrections or new information we wish to convey. References from the scientific literature to support our recommendations are provided in a References section at the end, and are referred to numerically in order of their appearance.

Please address any questions related to these comments to Dr. Dawn Gouge at dhgouge@email.arizona.edu; mobile 602-418-5202.

Thank you for the opportunity to comment.

Comments on Draft List of Pests of Significant Public Health Importance—Revised 2020

Spelling and form:

Chigger mites – Family spelling is wrong – Trombiculidae
Crab louse – spelling of species name *Phthirus pubis*
Cat flea – spelling of Murine typhus
Actinomyces spp. – spelling of actinomyces-granulomatous
Tamiasciurus spp. (same line as Tree squirrels and chipmunks) – missing the "s" in spp.
Microorganisms section, all the "spp." are italicized. The spp. should not be italicized.

Additional diseases related to listed pest species:

Amblyomma maculatum - vectors *Rickettsia parkeri* that causes rickettsiosis.[1]

Additional pest species:

Loxosceles deserta - documented incidence of cutaneous loxoscelism.[2]

Triatoma rubida – most commonly referenced *Triatoma* species causing allergic reactions in AZ.[3]

Triatoma recurva – commonly found species in homes in AZ and TX, cause allergic reactions.[3]

Triatoma gerstaeckeri - commonly found in the peridomestic and domiciliary microhabitats in south central states and vector of *Trypanosoma cruzi.* [4,5]

Cheyletiella mites (*Cheyletiella* spp.) – can cause skin irritation and scaling (known as *Cheyletiella* dermatitis).[6]

Straw itch mite (*Pyemotes tritici*) – dermatitis.[7]

Chicken mites (*Dermanyssus gallinae*) – dermanyssosis.[8-11]

Oak leaf gall mite (*Pyemotes herfsi*) – mites are dispersed on wind and cause red, itching, and painful welts in the mid-west[12].

Tropical rat mites (*Ornithonyssus bacoti*) – can become significant pests under certain conditions. When their primary hosts nest in, around or on homes, these mites may invade the structure and their bites can cause irritation and dermatitis[13].

Tropical fowl mites *Ornithonyssus bursa* – can become significant pests under certain conditions. When their primary hosts nest in, around or on homes, these mites may invade the structure and their bites can cause irritation and dermatitis.[14]

The species that follow can be troublesome but may not be as frequently encountered in many parts of the U.S. compared to the previous pest list:

Fowl ticks (*Argas persicus*).[15-16]

Ground squirrel flea *Oropsylla montana* (family Ceratophyllidae). [17-18]

Prairie dog flea *Oropsylla hirsuta* (family Ceratophyllidae). [19-20]

Who We Are

Dr. Dawn Gouge is Professor, public health entomologist and integrated pest management specialist for the University of Arizona. Integrated Extension and research efforts include IPM implementation programs in community environments and operational research aimed at improving mosquito management, reducing risks posed by vectors. Translational research studies focus on pest ecology and IPM of public health pests, including venomous arthropods, disease vectors, and bed bugs.

Dr. Shaku Nair is Associate in Extension, Community IPM at the Arizona Pest Management Center (APMC). An entomologist by training, Shaku has expertise in integrated pest management in natural (plants) and structural environments (urban). Her program is focused on community education and outreach aligned with national EPA priorities (school IPM) and IPM in community environments. She is involved in translational research on vectors and venomous arthropods, pests of public health concern, and pests of turf and landscapes.

Dr. Shujuan (Lucy) Li is Associate in Extension, Public Health IPM at the APMC. Her primary responsibilities include translational research studies focused on IPM, pest ecology and reduced-hazard management of public health pests and related priories, including venomous arthropods, disease vectors (such as rodents, mosquitoes and ticks), and bed bugs. She has extensive experience on IPM outreach, IPM implementation programs and long-term impact assessments in public schools and public housing.

Dr. Alfred Fournier is Associate Director of the APMC / Associate Specialist in Entomology and has expertise in evaluating adoption and impact of integrated pest management and associated technologies. He serves as a Southwest Region IPM Network Coordinator for the Western IPM Center, representing stakeholders in the desert Southwest states.

These comments are the independent assessment of the authors and the Arizona Pest Management Center as part of our role to contribute federal comments on issues of pest management importance and do not imply endorsement by the University of Arizona or USDA

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