

## Pesticide Use Data – Why Getting It Right Matters

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Accurate data on agricultural pesticide use in Arizona has many uses that benefit grower communities:

- Data help the Arizona Pest Management Center (APMC) respond effectively to EPA pesticide registration reviews and other policy decisions to defend the important tools you have available to control pests (Table 1). **Real use data can impact registration decisions more than uninformed opinions.** Since 2005, the APMC has prepared more than 40 responses to pesticide registration issues, available at: [http://ag.arizona.edu/apmc/Arid\\_SWPMC\\_Info\\_Requests.html](http://ag.arizona.edu/apmc/Arid_SWPMC_Info_Requests.html)
- **Data support research & outreach for effective pest management decisions.** Examples include chemical use maps that can help pest control advisors (PCAs) manage whiteflies while reducing the chance of developing resistance: <http://ag.arizona.edu/crops/cotton/files/1stPrinciples.pdf>  
<http://ag.arizona.edu/crops/cotton/files/UseMaps.pdf>
- Data document long-term pesticide use trends that **reveal a successful and progressive Arizona agriculture industry** with active environmental stewardship (Fig. 1): [http://cals.arizona.edu/apmc/docs/NIFA-IPM-Programs-Legacy-and-Impacts\\_extract.pdf](http://cals.arizona.edu/apmc/docs/NIFA-IPM-Programs-Legacy-and-Impacts_extract.pdf)
- The **APMC Pesticide Use Database** captures Pesticide Use Reports (L-1080) submitted to the Arizona Department of Agriculture. An advisory board of growers, PCAs and registrant company representatives advises our use of these data<sup>1</sup>.

**The accuracy of pesticide use data impacts the quality of our outreach, publications and reports.** We review data and correct occasional errors to make our information as accurate as possible. While errors represent only a fraction of the data, with an average of 30,000 1080s submitted annually, and over 100 data fields for each 1080 record, **even low error rates can lead to significant flaws in aggregated data.** Errors include data entry errors, duplicated data (submitted to ADA more than once), and invalid location data (Township, Range & Section) (Fig. 2).

### How Can You Help?

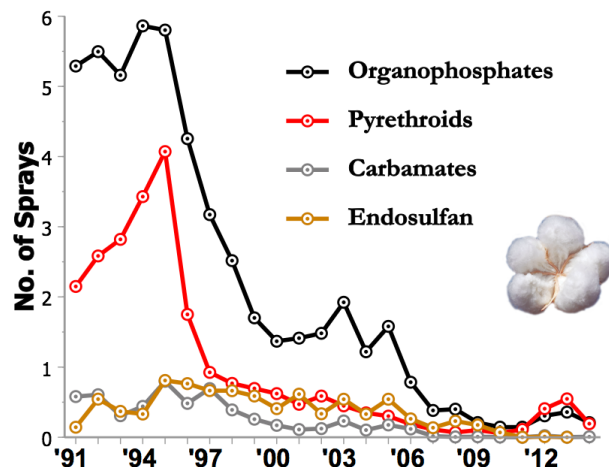
- **Submit each 1080 form to ADA only once.** If you submit data electronically (e.g., through Agriani), ADA has confirmed that a signed faxed or mailed copy should not be submitted also.
- **Check legal (location) descriptions for your fields.** Invalid township, range or section numbers are among the most common errors we see. Check our website for mapping tools that can help you verify field locations. <http://cals.arizona.edu/apmc/1080support2.html>
- Have a Question? We are glad to help. Contact Al Fournier at 520-374-6240 or [fournier@cals.arizona.edu](mailto:fournier@cals.arizona.edu).

### More info:

<sup>1</sup>If you are interested in participating on the APMC Pesticide Use Data Advisory Board, contact Al Fournier [fournier@cals.arizona.edu](mailto:fournier@cals.arizona.edu), 520-374-6240

**Table 1.** Recent examples of APMC responses to EPA on pesticide issues of importance to Arizona agriculture.

Topic	Thesis	Date
<b>Sulfoxaflor</b>	Restore label in cotton, citrus, cucurbits, & seed crops; preserve options for mixing; chemicals; safety on bees and other beneficials has been demonstrated	6/2016
<b>Imidacloprid (on citrus)</b>	Important tool to control citrus nematode and invasive Asian citrus psyllid, which vectors HLB (citrus greening disease)	4/2016
<b>Chlorpyrifos</b>	EPA's risk assessment models do not fit Arizona agriculture and extensive testing shows no chlorpyrifos residues in water	1/2016
<b>Pollinators</b>	EPA's proposal to eliminate use of 76 AIs in crops with contracted pollinator services would cause economic harm and is not justified based on lack of bee incidents	8/2015



**Figure 1.** Statewide average use of broad-spectrum insecticides (per acre) in Arizona cotton show dramatic declines from 1991 through 2014. The bump in 2012-13 was largely due to brown stink bug treatments.



**Figure 2.** We review submitted applications that do not correspond with agricultural areas and make corrections. In this fictional example, we moved an application from Section #3, in the desert, to Section #30 in adjacent Township. Applications may be moved based upon: (1) valid information on 1080 form; (2) reported field name or (3) confirmation of actual location with PCA or grower.

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