

Rebuttal to Hurley et al. (2014) from the Georgia Structural Pest Control Commission

BRIAN T. FORSCHLER, DERRICK LASTINGER, CHRIS GORECKI, JIM HARRON, DAN SUITER, BODINE SINYARD, GREG HOLLEY, LAURIE PADGETT, AND CHRISTY KURIATNYK

he 2014 summer edition of *American Entomologist* contained an article entitled "Regulating Pesticide Use in United States Schools" that mentioned efforts enacted by the State of Georgia (Hurley et al. 2014). The Georgia Structural Pest Control Commission (GSPCC) were pleased to note that the article highlighted Georgia's regulatory involvement, as we feel those efforts could serve as a blueprint for other State Lead Agencies (SLAs) in promoting School Integrated Pest Management (SIPM) programs. However, the GSPCC felt that the article contained certain inaccuracies and the purpose of this rebuttal is to point out and correct these inaccuracies.

The Georgia Structural Pest Control Act of 1955 created the Georgia Structural Pest Control Commission (GSPCC). The GSPCC is composed of seven members, including a designee from the University of Georgia Department of Entomology, the Georgia Department of Agriculture (GDA), and the Georgia Department of Public Health. It also includes three certified Pest Management Professionals (PMP) and a consumer affairs and protection representative; these last four members are appointed by the Commissioner of the GDA. The Commissioner of the GDA serves as Secretary to the GSPCC. The Commission is charged with issuing licenses and certifications and approves PMP recertification training. The GSPCC is also charged with creating the Rules, which are enforced by the GDA, to protect the interest, health, and safety of the public and govern PMPs.

In November of 2000, the GSPCC amended the Rules to establish minimum treatment standards for the treatment of schools. The new standard provided greater protection against the accidental exposure of children to pesticides. Hurley et al. (2014) references the "Georgia School Pesticide Act (2003)" on pages 108 and 111 under the topic headings "Pesticide application record-keeping" and "Enforcement," respectively. There is no such act. A search of the Georgia Legislature Web site for 2003 (http://www.legis.ga.gov/legislation/en-US/display/20032004/HB/1042) does display a copy of HB 1042 that was never introduced. That bill was never brought to legislative session because it would have placed the burden for action on schools to comply with an additional layer of administrative reporting requirements. In 2005, the GSPCC revised the Rules to include a requirement for recording time-in/time-out of school facilities on Pesticide

Use Records (PURs) to assist regulatory oversight of incidents of pesticide applications made while children are present or likely to be present in a school facility.

We agree with the authors of the *American Entomologist* article that regulation of pesticides does not guarantee safety (Hurley et al. 2014, p. 106). However, the approach of the GSPCC in regulating the professionals that apply pesticides in Georgia schools was based on the concept that the person most qualified should be one that is licensed and certified by state regulatory statues. The concept of using SLA enforcement capability to assist in SIPM implementation is borne out on page 111 of Hurley et al. (2014) that highlights the GSPCC and the GDA commitment to regulating pesticide use in Georgia schools.

Unfortunately, the article provided inaccurate numbers in reporting the monetary penalties and surrender of certifications related to GDA review of PMP PURs. The article states, "Additionally, between August 2008 and August 2011, \$218,250 in monetary penalties was imposed and 15 certified operator certifications surrendered or revoked (GDA 2012)." An examination of the data published on the GDA Web site shows that from August 2008 through August 2011, there were 13 designated certified operator certifications surrendered and a total of \$146,000 in fines levied (\$122,500 for pesticide misuse and \$23,500 for record keeping violations)(GDA 2012). The numbers reported in Hurley et al (2014) were for *all* GDA violations posted in that time frame, not the SIPM program.

Further, unlike what was reported in Hurley et al. (2014), there is no requirement to have a school IPM policy in Georgia and the Rules of the GSPCC do not address specific SIPM contract requirements. The article also states, in that same "Enforcement" section (p. 111), "GDA has implemented 'self-reporting' between PMPs and regulators" (Hurley et al. 2014). The GDA has encouraged self-reporting since 1996, when the EPA adopted the policy "Incentives for Self-Policing: Discovery, Disclosure, Correction, and Prevention of Violations." The GDA and the GSPCC actively embrace and encourage this concept by highlighting to PMPs the need to review their operations involving the treatment of schools, but self-reporting is not GDA policy (Harron 2009).

The magnitude of the issues noted during the 2007 GDA inspections of schools prompted an educational outreach

and Web-broadcast meeting in Atlanta. The meeting, held in June 2008, was designed to provide information on SIPM and reaffirm the GDA's commitment to inspecting the professional application of pesticides in schools for compliance with pesticide use rules, including proper PURs. The meeting was attended by over 400 people from the regulated community and included presentations from three University of Georgia entomologists, the GSPCC, GDA, and a panel of PMP practitioners (Harron 2009). The outreach effort was well received and widely viewed online. The educational efforts of the GSPCC did not end there, as they endorsed a definition of IPM in 2008 and in 2014 added an entire chapter on IPM to the Technician Training Manual that is the study guide used for certification and recertification exams.

We agree wholeheartedly with Hurley et al. (2014) that "compliance has improved dramatically" in Georgia. The enforcement data associated with pesticide regulation in Georgia schools indicate progress toward adoption of IPM practices in PMP service to schools. The original data revealed that 55% of all violations were attributed to 4 of the 58 companies contracted to service Georgia schools and that 68% of all the violations were considered minor (Brannon 2010). A comparison of data from the initial GDA Structural Pest Control Division inspections conducted from April 2007 to June 2009 showed that there was \$740,000 in monetary penalties imposed along with 62 certifications and 9 company licenses surrendered or revoked (Harron 2009). The enforcement data from inspections conducted between July 2009 and June 2012 shows \$82,500 in monetary penalties and 9 surrendered certifications. This amounts to a greater than 85% reduction in both categories, compared to the first 2.2 years of GDA school PUR inspections. Routine inspections on PMP school PURs during a statewide compliance monitoring effort in 2011 and 2012 found mostly minor violations and involved non-compliance in record-keeping requirements, indicating that the approach taken in Georgia, relative to SIPM, is a viable alternative to a legislative-mandated program. Enforceable regulations passed by the GSPCC, combined with consistent statewide compliance monitoring and enforcement efforts by the GDA, have shown that Georgia's approach to reducing the risk of pesticide exposure to children in schools is a viable and effective method of establishing statewide SIPM best practices.

We firmly believe that regulations cannot guarantee effective pest management, but they can be used to oversee adherence to best management practices addressed in regulatory statutes. The GSPCC and GDA, working with state legislators and PMPs, have taken actions aimed at ensuring proper and appropriate regulation of pesticide use by PMPs in schools. Of course, the GSPCC and GDA's approach to regulating pesticide use in schools only affects those schools that contract for pest management services. Nevertheless, a 2011 survey of the 180 school districts in Georgia found that 93% (n=167) contracted pest management services (Brannon 2011). The approach used by the GSPCC and the GDA to SIPM accepts that a SLA regulatory body can address pesticide use applied by trained and certified practitioners while assisting schools to get the best pest management service.

It should be noted that attempts by the GSPCC to work with the State Department of Education on SIPM have been met with less than the required enthusiasm. A lack of commitment by school personnel for SIPM is an example of the need to consider human failure and indifference analysis when examining the low/slow adoption rate of SIPM implementation (Shappell and Wiegmann 2000, Johnson et al. 2004, Gouge et al. 2006, Hutchins 2010).

In summary, the GSPCC appreciates the interest of the authors of "Regulating Pesticide Use in United States Schools" (Hurely et al. 2014), displayed by including our efforts to regulate pesticide applications in schools. The common-sense approach of building a consensus with state legislators, industry associations, PMPs, and the SLA have, we believe, provided a verifiably viable approach to SIPM. We hope that by correcting the factual errors in Hurley et al. (2014), we have also illustrated an alternative approach to SIPM for SLAs to consider, compared to the extra administrative burden placed on schools by legislatively mandated SIPM programs.

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Brian T. Forschler,* Department of Entomology, University of Georgia; Derrick Lastinger,* Georgia Department of Agriculture; Chris Gorecki,* Rollins Inc.; Jim Harron,** Georgia Department of Agriculture, Rollins Inc.; Dan Suiter,** Department of Entomology, University of Georgia, Bodine Sinyard,* Adams Exterminators; Greg Holley,* Zone Pest Solutions; Laurie Padgett,* Consumer affairs and protection; and Christy Kuriatnyk,* Georgia Department of Public Health.

* Denotes a current member of the Georgia Structural Pest Control Commission **Denotes a past member of the Georgia Structural Pest Control Commission

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Reply from Hurley et al.

We wish to thank the Georgia Structural Pest Control Commission for their reading of our paper and sharing this great information about how they are helping and working with schools and pest management professionals to keep schools safe from pests and pesticides.