

## 2010 Pesticide Safety Education Program (PSEP) Proposal



**A. TITLE:** Turfgrass Pest Management for Arizona. D.M. Kopec.

**Members:** M. Olsen. K. Umeda. J Gilbert. P. Baker.

- B. *Specific Activities Proposed:*** Develop Training Materials and provide seminars for CEU credit maintenance for all industry parties involved in turfgrass maintenance.
- C. *Develop*** identification slide sets for inclusion on the Turfgrass and other UA websites. Produce and deliver seminars in Pima, Maricopa, Coconino or other cool weather county, and other requesting counties. Impacts to include number of students trained at seminars, and use patterns on websites.
- D. *Target audience:*** Golf course superintendents and assistants, Sport Turf managers, Parks Maintenance personnel, Professional Landscapers . These clientele will be provided with easy to understand information on pesticide application equipment calibration, pest and abiotic problem diagnosis, pest identification, cultural management of pests, and applicable use of plant protectant agents.
- E. *Budget:*** Technical salary for J. Gilbert. Funds will be used to developed program materials for inclusion on the Turf Web site (written, and visual) for pest problem identification and management thereof. Will include abiotic diseases (drought, salinity, root zone problems, improper irrigation, and product mis-application) and biotic problems (major turf diseases, insects, weeds).  
Funds requested \$5K (Salary): \$1.5K. (website maintenance for Urban entomology website housed in entomology). Total funds requested \$6.5K.

**F. *Expected outcomes / impacts:*** Material developed will be added to the existing turf website as a more formal section for “Diagnosing turfgrass problems”. Thus, the size of the audience will be expanded. Cross links to the entomology and Plant Pathology website will be provided with applicable texts.

Seminars will train personnel listed above, providing applicable CEU units for pesticide applicator training/maintenance.

**G. *Evaluation:*** Program evaluations will be provided at seminars which will assess the viability of the executed programs, and query new and necessary topics for inclusion.

Examples of topics include:

1. Pesticide product and application safety
2. Pesticide calibration techniques.
3. Root zone and foliar pests of turf
4. Rapid bite disease of turf.
5. Heat, salt and drought stress on turf.
6. Abiotic turfgrass problems.
7. Step-wise skill development for solving turfgrass “customer” problems
8. Winter weeds and weed control.
9. Summer weeds and weed control.
10. Water and soil pH effects on pesticide efficacy.
11. Spray boom checklist.
12. Monsoon turfgrass diseases.
13. Above and below feeding turf insects. I.D. and control
14. Product chemistries for bermudagrass overseeding.
15. Diseases, weeds and insects for high elevation turfs.

*Personnel:* D. Kopec has been providing turf pest and pesticide technology training as a public educator since 1985, conducting weed control, PGR and use of herbicides in turfgrass management for 24 years (field research and outreach). Kopec has formal training in turfgrass entomology, weed control, pathology, soils and water quality. Mary Olsen has formal training and research expertise in turfgrass diseases and management, and maintains the Plant pathology website. Paul Baker is a trained entomologist, and intends to up-date the companion Urban Pest Management web site, which will also contain

selected problem materials, as well as cross link references between the Turfgrass, Plant Pathology and Urban IPM web sites. Jeff Gilbert is a Research Specialist in turf, with 20 years of experience at the U of A. He is a certified IA Irrigation auditor, with good computer skills. He will compile materials and produce formats for the respective media types, which will be forwarded to all 3 website managers for inclusion. He will be responsible for the abiotic disease portion of the program.