

Pesticide product stewardship

By Mark A. Mossler and Stephen H. Futch

As growers share tales of pest and weed control, one of the favorite topics is pesticide and herbicide pricing. The grower who finds the lowest price is often considered the “winner” by his or her peers. However, when a grower uses an active ingredient for which a tolerance exists, but does not buy the product with the use site on the label, he or she has opened a Pandora’s Box that may cause future problems.

There are several situations in Florida-grown citrus that approaches the scenario named above. In particular, 2,4-D has become a popular grove weed management tool for glyphosate-tolerant weeds. However, the only product which is legally available for Florida citrus growers who wish to incorporate 2,4-D into their grove weed management plan is Landmaster II.

The Special Local Needs Registration (SLN) FL-00004 was acquired in 2000 for use in citrus by Monsanto. This label incorporates the Florida Organo-Auxin Herbicides rule from Florida Administrative Code 5E-2.033, which describes the restrictions and prohibitions regarding the use of 2,4-D around susceptible crops, even if using a shielded boom sprayer. This label must be in possession of the applicators spraying the product in the grove.

Not following these steps leads to compliance violations which are enforced by the Florida Department of Agriculture and Consumer Services’ Bureau of Compliance Monitoring. This agency has increased the number of inspectors so growers should expect greater enforcement of this and other pesticide related issues including Worker Protection Standards rules.

These types of issues are not isolated SLN registrations. Pendimethalin has been registered for use in non-bearing citrus for many years. A new tolerance for pendimethalin in the citrus group was obtained in April 2006. However, the only pendimethalin product which has bearing citrus on the label is Prowl H₂O, and this is on a supplemental label. Supplemental labels, just like the primary (Section 3) labels, are submitted and approved by the Environmental Protection Agency (EPA) and must be in the user’s possession during application.

Enforcement is not the only issue growers may face if they purchase a product with the site not on the label. Although a bargain price sounds good, use of this type product (off-label) results in a loss of any manufacturer

liability and violates the law. Such practice also makes posting under the state and federal Worker Protection Standards difficult, since all pesticide products must be recorded and posted and these records can be used to verify pesticide usage within a given site. For all of these reasons, it is important for the grower to do things the right way with pesticide products and follow all parts of the label.

Restricted entry interval (REI) and pre-harvest intervals (PHI) label information must also be followed. The REI is the time that must pass before workers are allowed back into a field without special personal protective clothing. Examples of REIs can vary from as short as a few hours to up to several days. In the case of various formulations of glyphosate, the REI will vary by product from four to 12 hours and with Landmaster and pendimethalin products, the labels indicate a 48-hour REI. Where multiple products are used in a single application, the REI would be the longest interval for any individual product.

The PHI is the time that must pass before the crop can be harvested. When this interval is a year or more, the materials obviously cannot be used for bearing citrus. An example of this is again pendimethalin. The PHI for Pendi-max is 12 months, indicating the product can only be used in non-bearing citrus. However, for the newer formulation of pendimethalin (Prowl H₂O), the PHI is 60 days, which is still longer than others, such as 30 days for norflurazon (Solicam) or 0 days for diuron (Karmex, Direx). These PHIs are very important in planning pesticide application to coincide with anticipated harvest schedules.

In addition to the above information, the pesticide label will indicate application rates, maximum rates per year, personal protective equipment, site use requirements, other restrictions, and requirements that will be necessary when using the product. Remember the label is the law and must be followed exactly.

For more information on pesticide pricing, see the UF/IFAS Electronic Data Information Source (EDIS) at <http://edis.ifas.ufl.edu/index.html> and search under author (Mossler). For more information about supplemental labels, see October’s edition of Chemically Speaking at <http://www.pested.ifas.ufl.edu/>

Mark A. Mossler is doctor of plant medicine, University of Florida in Gainesville; Stephen H. Futch is Extension agent, multi-county, Citrus Research and Education Center in Lake Alfred.