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AS WE SEE IT

JERRY ROCHE, EDITOR-IN-CHIEF



And good riddance, affirmative action?

Ward Connerly, according to an article in *Newsweek* magazine earlier this year, doesn't want to be defined as an affirmative action businessman, despite the fact that the black Californian half-owns a land-use consulting company.

"I want to be judged by the quality of my work," he told *Newsweek*.

An admirable attitude, to be sure. But, unfortunately, racial bigotry still exists in certain pockets of this country. And that's what has helped affirmative action proliferate for the last quarter-century.

The state of California will put the issue to a vote next year: Is it good and just to continue affirmative action, which has confounded many a small businessman and government contractor for 25 years? Or is it an exercise in futility?

When the Supreme Court heard *Adarand Constructors v. Peña* in June, the only clear message sent by its 5-4 decision was that racial preferences are rarely acceptable.

The once-noble idea of affirmative action, like a lot of federal legislation, has been radically abused. It has also mutated. Originally meant to assist African-Americans, the victims of 200 years of victimization and oppression in this country, its interpretation has since widened.

Now included as "protected classes" by the government are women, Hispanics, Orientals, Iranians and virtually every other minority in this country. In four cities (Minneapolis, Seattle, San Francisco and Santa Cruz, Calif.), transsexuals are even protected by affirmative action rules.

Affirmative action has led, over time, to many contractors—especially those who deal with government entities—adjusting their business practices to take advantage of the government. For instance, one contractor appointed his sister president of the company while he assumed the role of vice-president. That way, the company

qualifies as "disadvantaged" or "protected." Frankly, there's nothing wrong with this approach; it's simply a smart businessman doing some creative thinking—and a lot of people are doing it.

It's no secret, then, that our government has overcompensated. Its policies, as one pundit notes, "in the name of equality, leapfrog the less qualified over the better qualified."

Almost universally—even among minorities like Connerly—affirmative action is seen as wrong:

"So long as we continue to count by race, ethnicity and gender, and to distribute benefits and preferences accordingly, civil rights will be a hollow and corrupt substitute for equal opportunity." (Linda Chavez, writing in *Forbes* magazine)

"Many minorities and females have no definitive way to know whether, or to what extent, they got where they are by their own efforts. By and large, group quotas stigmatize even legitimate achievements." (Dr. Thomas Sowell, a black, writing in *Forbes*)

That government is now taking a closer look at affirmative action is a step in the right direction. Only time will tell, however, whether our elected political leaders have the social wisdom to—at the very least—amend the tenets of affirmative action.

As black jazz pianist Duke Ellington once said, all he ever wanted was the chance to command, rather than demand, respect. Would that it were so.

Jerry Roche

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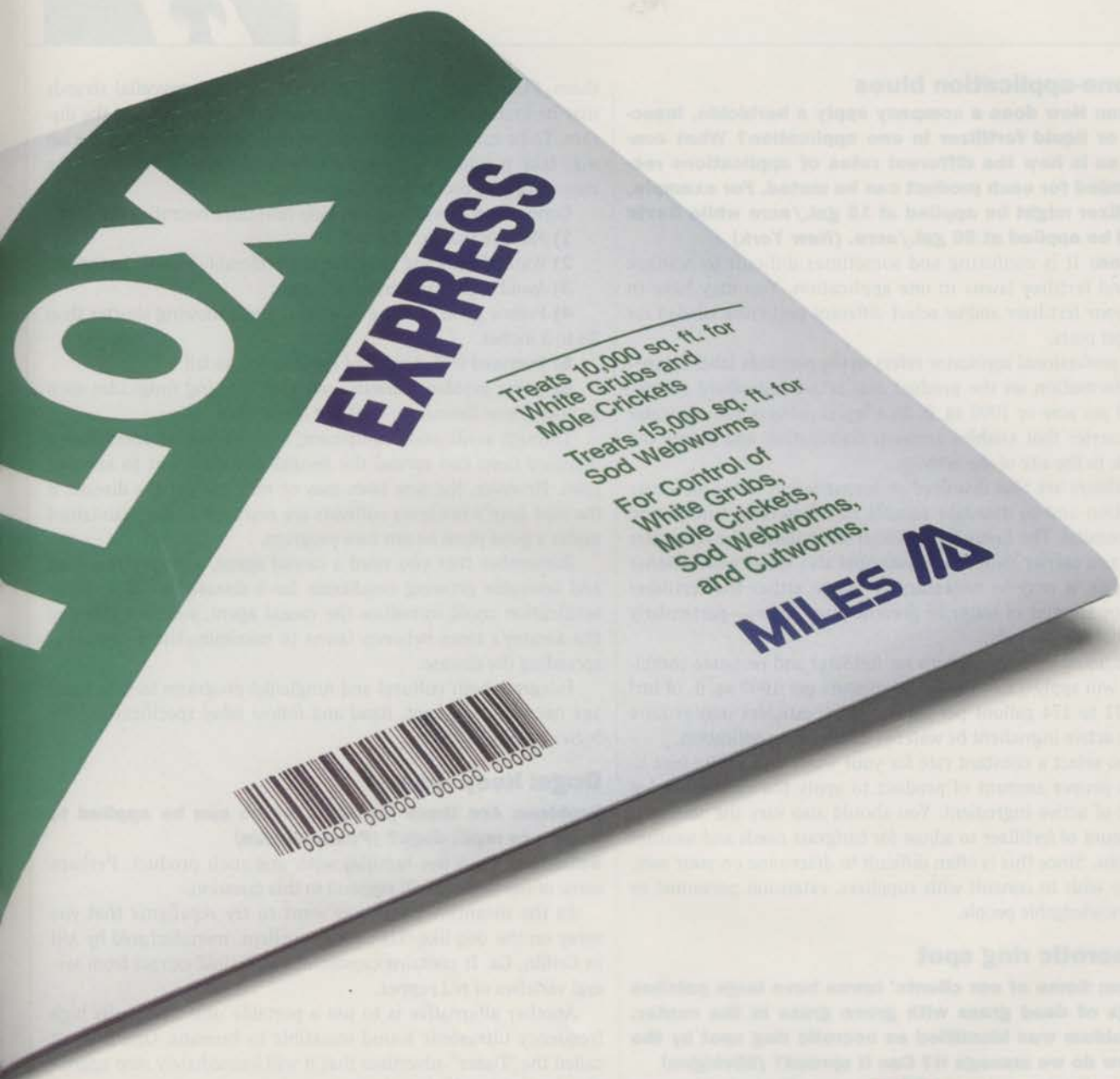


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ASK THE EXPERT

DR. BALAKRISHNA RAO



The one-application blues

Problem: How does a company apply a herbicide, insecticide or liquid fertilizer in one application? What confuses us is how the different rates of applications recommended for each product can be mated. For example, a fertilizer might be applied at 15 gal./acre while Sevin should be applied at 50 gal./acre. (New York)

Solution: It is confusing and sometimes difficult to manage pests and fertilize lawns in one application. You may have to adjust your fertilizer and/or select different pesticides labeled for the target pests.

The professional applicator refers to the pesticide label for specific information on the product and active ingredient recommended per acre or 1000 sq. ft. In a liquid delivery system, water is the carrier that enables uniform distribution and moves the pesticide to the site of the activity.

Fertilizers are also dissolved or suspended in water for easier application and to decrease soluble salts, thereby minimizing burn potential. The lower the fertilizer's salt index, the less water needed as a carrier. Since burn potential also varies with weather conditions, it may be necessary to adjust either the fertilizer source or amount of water to prevent plant injury—particularly during hot, dry periods.

Most liquid delivery systems for fertilizer and pesticide combinations will apply 3 to 4 gallons of mixture per 1000 sq. ft. of turf area (131 to 174 gallons per acre). Some pesticides may require that the active ingredient be watered in after the application.

If you select a constant rate for your water carrier, be sure to add the proper amount of product to apply the recommended amount of active ingredient. You should also vary the source(s) and amount of fertilizer to adjust for turfgrass needs and weather conditions. Since this is often difficult to determine on your own, you may wish to consult with suppliers, extension personnel or other knowledgeable people.

On necrotic ring spot

Problem: Some of our clients' lawns have large patches of rings of dead grass with green grass in the center. The problem was identified as necrotic ring spot by the lab. How do we manage it? Can it spread? (Michigan)

Solution: Patches and rings of dead grass in Kentucky bluegrass lawns may be an indication of necrotic ring spot disease caused by *Leptosphaeria korrae*. The tillers in the affected area will be dead and brown. These patches often have a tuft of healthy grass or weeds in the center. This symptom will look like Fusarium blight disease or a "frog-eye" appearance. Affected areas may range from a few inches to one or two feet (or larger) in diameter.

Visible symptoms usually appear in April to July and again in September and October. Symptoms may not be apparent during the hottest part of the summer.

Prior identification of patch diseases is important in managing

them. Field diagnosis is difficult. Often, black mycelial strands may be found on the tillers, suggesting the possibility of the disease. To be sure, laboratory confirmation is important, but the lab may take two to three months to induce fruiting bodies. In the meantime, the problem may get worse.

Good cultural practices can help minimize necrotic ring spot:

- 1) Manage thatch.
- 2) Water deeply and infrequently, preferably in early morning.
- 3) Avoid high nitrogen fertilization.
- 4) Follow good mowing practices. Avoid mowing shorter than 2½ to 3 inches.
- 5) Overseed with perennial ryegrass in the fall.
- 6) If the problem persists, consider applying fungicides such as Rubigan or Banner in April and September.

Through aerification equipment, some of the soil cores from a diseased lawn can spread the fungal disease agent to another lawn. However, the new lawn may or may not get the disease, if the new lawn's turfgrass cultivars are resistant or are maintained under a good plant health care program.

Remember that you need a causal agent, a susceptible host and favorable growing conditions for a disease to occur. Since aerification could introduce the causal agent, consider cleaning the aerator's tines between lawns to minimize the potential of spreading the disease.

Integrate both cultural and fungicidal programs to help manage necrotic ring spot. Read and follow label specifications for better results.

Dogs: keep away

Problem: Are there products which can be applied to people to repel dogs? (Pennsylvania)

Solution: I am not familiar with any such product. Perhaps some of our readers will respond to this question.

In the meantime, you may want to try repellents that you spray on the dog like "Halt" dog repellent, manufactured by ARI in Griffin, Ga. It contains capsaicin, an alkaloid extract from several varieties of red pepper.

Another alternative is to use a portable unit that emits high frequency ultrasonic sound inaudible to humans. One product called the "Dazer" advertises that it will immediately stop aggressive dogs within 15 feet of you.

Dr. Balakrishna Rao is Manager of Research and Technical Development for the Davey Tree Co., Kent, Ohio.

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Easy-to-use CONTROL PRODUCTS

Once considered only for the amount of product they contained, packages for turf and ornamental chemicals are now more environmentally- and user-friendly.

by Jerry Roche
Editor-in-Chief

IF YOU'RE NOT using products packaged in water soluble pouches, you might want to try them. They're much easier and safer to use than conventionally-packaged products. If you already use them, be advised that extra care is needed to get the dosage right.

Though the products contained in the pouches are generally not new, they are considered new by some marketers—solely by virtue of their packaging.

"The pouches are the next generation of broadleaf herbicide formulations," contends Sean Casey of Riverdale Chemical, which offers such packaging for four products. "The actual products are the same as our regular products, but all the user has to do is open up the packet and drop it in the tank."

Manufacturers believe the pouches solve a variety of problems.

First, there is the applicator safety issue. Some products—broadleaf herbicides, especially—are corrosive and harmful to a person's eyes, according to Casey, with water-soluble technology, the product is untouched by human hands from manufacturer to lawn. This virtually eliminates the risk of applicator or mixer/loader exposure.

Secondly, no hazardous waste disposal is involved. Since the packets dissolve completely in the tank, you don't have to worry about triple-rinsing any containers before disposing of them.

"Federal EPA, state and local regulations are definitely a consideration," notes Steve Chaney, turf & ornamental product manager at Bayer. "For instance, California has a requirement for closed systems. Minnesota has a regulation for the return of all metal containers on the agricultural side."

According to regulations, disposable pesticide containers must follow the "six-

nines" rule; that is, to avoid being categorized as hazardous waste, they must be 99.9999% clean. That is not a concern for users of water soluble packaging (WSP).

"Federally, we're being encouraged to use more user-friendly packaging," says Mark Urbanowski, marketing manager at DowElanco.

Thirdly, with the new low-dosage products, WSP is more convenient because you don't have to mess with measuring.

"The products we put in water soluble pouches are low-use chemistries," says Joe Yoder of Sandoz. He says that Barricade can be used at as little as $\frac{1}{2}$ oz. active ingredient per 1000 sq. ft. "We didn't want users to get into mis-measurement issues." Yet Sandoz, Yoder says, won't use WSP for some products. "We want the formulation in the pouch to be an advanced product."

Finally, there is an additional option, which DowElanco chose for some of its Dursban professional product: a child-resistant outer bag that stores seven water-soluble packets. The reclosable outer bag is moisture- and odor-proof and features a zipper lock for extra safety.

What is it?—WSP is normally made of a chemical called polyvinyl alcohol, or PVA. It was first offered to the market by Ciba Turf & Ornamental in the late 1980s, but its popularity continues to grow.

"We made the switch to PVA packaging for Bayleton three years ago," says

Bayer's Chaney. "Sales switched almost 100 percent to the PVA packaging the first year it was available."

"However, WSP is not for everyone. Merit, for instance, is sold in packages containing enough product to cover 11,000 square foot increments. But that's not good for people treating smaller-sized areas. So there's still a market for 'bulk-type' products."

Andy Seckinger of Rhone-Poulenc agrees: "Users universally like WSP. Response has been very positive. But if the end-user doesn't calculate the dose properly, it goes from a convenience to an inconvenience."

For instance, you should consider whether the size of the tank is proper for the size of the package. You should consider whether you are using the low or medium portion of the recommended rate spec-



You normally don't see a higher price tag when you buy water soluble pouches because the manufacturers are eating the extra cost.

Photo courtesy Ciba Turf & Ornamental

trum. Otherwise, you may find yourself over- or under-dosing the property.

"We started packaging Rubigan in water soluble packets specifically because of input we solicited from golf course superintendents," says DowElanco's Urbanowski. "We're trying to take the water soluble packet to the next step: to find out what size the customers really need."

The package itself is coming under closer scrutiny. According to Urbanowski, a new brand of PBA being used for Rubigan WSP has a faster dissolve time than before, dissolves completely in the tank, and it still has good tensile strength.

You should know, too, that PBA/WSP is more expensive to the manufacturer than standard bags, cans or drums. Yet you normally don't see a higher price tag when you buy them. That's because manufacturers are eating the extra cost and accepting lower profit margins—a plus for the end-user, who gets a safer, easier-to-use product at the same price per-1000 as conventional products.

"We don't get any of the costs back," says Derrell Kelso, product manager at Valent. "But it's not a cost issue. It's a stewardship and worker exposure issue, and it's the way to go."

The pouches also lend themselves to some nice extra advantages. For instance, AgrEvo offers its Prostar Plus as part of a "twin-pack" with Bayleton.

"Through our research, we found that a certain ratio of Bayleton to Prostar provided some good benefits, particularly on brown patch," says AgrEvo product manager George Raymond. "All you have to know is that one box (containing one pouch of Bayleton and one of Prostar) covers 'x' square feet.

"This type of arrangement also saves us the cost of doing a toxicological report on a premix."

And American Cyanamid says that Pendulum herbicide can be used with Roundup's pre-measured drypack.

"Our water dispersible Pendulum granules come in a 1.2-ounce pouch for 1000 square feet that is hard to use in backpack sprayers," says AmCy senior marketing manager Gary Curl. "It's designed with the landscape person in mind, and fits very well with Roundup's drypack. There's one bag of each; Roundup provides the total kill and

Pendulum provides the residual action."

Manufacturers, especially, like this opportunity. "There are people going to water soluble bags packaged within water soluble bags like a co-pack for certain combinations," Riverdale's Casey observes. "That way, the manufacturer doesn't need to apply for a new EPA label, which we have to do if we put two (or more) different control products in the same package."

Other innovations—WSP, however, is not the alpha and the omega in easy-to-use control products.

"We're working toward closed systems, but the market still may not be ready for this approach," says DowElanco's Urbanowski. "The feedback we get from the customer will be the driving factor."

However, at the 1996 International Golf Course Conference and Show in Orlando, Ciba T&O will unveil its new "LinkPak" unit, which transports product and charges it directly into a spray tank.

"The LinkPak is very portable," says Ciba fungicide manager Jerry Osborne. "Users can fill the LinkPak and then load the product in the field via a closed system (called the turfPak, see below).

Here are some other technological advances from the manufacturers:

- Ciba offers its returnable, refillable micro-bulk turfPak system, which contains 15 gal. of product and dispenses its contents via a computer-assisted pump. Users simply hook it up directly to a spray tank and program the proper product dosage into the computer.

"The turfPak reduced the amount of waste returned to the environment, [the equivalent of] 15 one-gallon jugs going into a landfill," says Ciba's Osborne. "There is no need to triple-rinse used containers, either."

- Last year, Ciba also introduced a closed-system microinjection unit for its Alamo tree fungicide. The units are inserted into small drilled holes in the flare root and tapped lightly with a hammer to release Alamo directly into the tree.

- "Tip'n'measure" containers are being used by Terra for its Maxon root activator/stimulator. Terra, incidentally, was a pioneer in developing dry flowable technology, and markets Terramark spray pattern indicator and lake colorant in a water soluble package.

Some control products available in water-soluble packaging

- **AGREVO: Prostar, Prostar Plus** (fungicides)
- **AMERICAN CYANAMID: Pendulum** (herbicide)
- **BAYER: Bayleton** (fungicide); **Merit, Tempo** (insecticides)
- **CIBA T&O: Primo** (growth regulator); **Pace** (fungicide)
- **DOWELANCO: Rubigan** (fungicide); **Dursban** (insecticide)
- **RHONE-POULENC: Chipco Sevin** (insecticide)
- **RIVERDALE: Dissolve, Triplet, Solution, Tri-Power** (herbicides)
- **SANDOZ: Sentinel** (fungicide); **Barricade** (herbicide)
- **TERRA: Thalonil** (fungicide)
- **VALENT: Orthene** (insecticide)

- Valent will release Pinpoint (a granular form of Orthene for the turf & ornamental market) in a recyclable 8-lb. bottle next year.

- Growth Products is now selling its liquid fertilizers, micronutrients and natural organic products in a 275-gallon mini-bulk packages. When emptied, the package can be broken down into a corrugated box and polyethylene bag liner for quick disposal and recycling. It gives customers the extra advantage of bulk pricing discounts plus easy disposal.

This brings us full circle: manufacturers will market whatever the government demands and whatever the green industry shows it is ready to purchase in sufficient quantities to turn a profit.

"WSP makes a lot more business sense than returnable drums," concludes Casey. "I think you'll see more products going that way if the product lends itself to it."

Rhone-Poulenc's Seckinger concurs: "A lot of what you'll see in the future in the way of new package innovations depends on what regulations are passed."

Advantages of WSP

- Convenience
- Reduced worker exposure
- Low odor
- Accuracy of measuring
- No EPA disposal problems

LOOK OUT FOR NUM



**PENDULUM[®], AMDRO[®]
AND IMAGE[®].**
**THE PROFESSIONAL'S CHOICE
FOR TOP
TURF PERFORMANCE.**

Savvy professionals rely on PENDULUM, AMDRO and IMAGE for reliable, cost effective control of unwanted hazards like problem weeds and fire ants.

And their confidence is repaid with courses that are noticeably better looking and more comfortable to play.

It's why they're the treatments of choice on the market today.

**PENDULUM Herbicide
with pendimethalin. Now for turf!**

PENDULUM provides proven turfgrass tolerance and excellent preemergent control of crabgrass, goosegrass and other troublesome weeds. And with its superior season-long performance, people notice the difference when PENDULUM swings into action.

And although gentle enough for over-the-top application to more than 260 labeled ornamentals, 45 broadleaf and grassy weeds don't stand a chance against PENDULUM.

**AMDRO Fire Ant Bait: Kills the Queen.
Kills the Mound.**

Fire ants may be annoying and dangerous, but they're not all that smart. That's why it's easy for AMDRO to fool worker ants into thinking it is food.