LOOKING somewhat like a lawn mower, the new "Meter-Miser," being introduced by Amchem Products, makes it possible to combine the economy of using liquid chemicals with the safety of accurate drift-free application. Instead of cutting blades, however, the new mechanism controls vegetation through the use of a special applicator disc and chemical herbicides.

The new chemical applicator also eliminates complex metering and calibration, Amchem reports. Formulas recommended for use in the device are adjusted to the machine's tank capacity. For example, one can half fill the tank with water, add one gallon of Liquid Amazine Meter-Miser formula, finish filling the tank and spray. One five-gallon tankful of spray mixture is said to be enough to cover 4,840 square feet; nine gallons will control vegetation on an acre of land.

In operation, the new applicator puts down a standard 36-inch swath of the premeasured liquid formulas at a constant rate; the spray pattern is such that no area larger than a dime is left uncovered.

Additional attributes of the machine are that, being highly mobile, there is no need to drag supply hoses or carry heavy spray equipment. Lightweight, compact and inexpensive, it can be used by industrial, utility, institutional and other maintenance supervisors.

Specifications

Special appeal of the Meter-Miser to applicators is revealed in a listing of its specifications.

All parts that come into contact with chemical solutions and mixtures are made of corrosionproof plastics. The ruggedly built device weighs 30 lbs. empty; overall length is 54 inches with a handle 41½ inches long. Gravity flow supplies its centrifugally operated spray discs. Instant on/off control is actuated by the spring-loaded chain located on plated steel handles. Outside diameter of its rubber wheels is 10 inches. Outside width of the cowl is 41½ inches and its tank capacity is slightly more than 5 gallons. Because its spray-disc dispenser is so close to the ground, there is no chance of chemical drift. And, it's claimed, an operator can walk fast or slow without affecting the rate of application.

A limited number of demonstrator models now being tested by custom applicators show that the device will fill a need for use on smaller spraying assignments, especially over smooth terrain. This would include areas such as roadways, parking areas, and utility substations.
To double the output of Meter Miser, extendable arm mount is removed from storage space underneath hood and mounted on right wheel. The new extension allows operator to spray a 72-inch swath of chemical. Pattern is such that no area as large as a dime is reportedly left uncovered.

Non-corrosive plastic disc spinning under the hood of the Meter Miser applicator affords accurate dosage and drift-free operation. Design of the applicator disc coupled with the pre-measured liquid formula in the tank eliminates the need to calibrate the new chemical applicator.

User Comments

Luther Scott, grounds maintenance manager at Cedarbrook Country Club, Blue Bell, Pa., comments on the hooded construction of the Meter-Miser, noting that “...it allows me to get in close to ornamental shrubs without fear of drift. I use it to spray around the golf tees, greens and sand traps. Since it leaves wheel marks on the turf, I can see where I’ve been and don’t have to be afraid of overdosing any particular section of our turf.”

The machine is also being used on grass plots at Penn State. Dr. Joseph Duich also comments on the fact that the wheel marks left by the machine prevent overdosing with chemicals, but he offers the following caution. “If you’re going to mix chemicals in the tank,” Duich says, “be sure to add water first, then the chemical, then the remainder of the water. This prevents a concentration from building up at the outlet valve which could be harmful when the machine is started.” Duich also has used the Meter-Miser on his own lawn, filling it with DDT and Sevin for control of mosquitoes and lawn insects.

Stauffer’s Lawn & Garden Center at Lititz, Pa., has advertised the Meter-Miser on a rental basis: $.25 per hour (two hour minimum) and recommends mixing broadleaf weedkiller with liquid nitrogen for fast “green-up” on lawns. Other claims he makes in his advertising circular are that the Meter-Miser can be used “... at any time of day ... 31c will kill over 50 kinds of weeds on 1,000 square feet of lawn ... 10 minutes time will cover 5,000 square feet ... no guesswork ... feed and weed, apply fertilizer at the same time ...”

Ken Snyder, of Snyder’s Tree Service, Martinsburg, Pa., says he has used the Amizine and Wee done Super D formulas for vegetation control and especially likes the machine’s ability to “... get in around shrubs without hurting them.”

Improved Model

A new feature of the Meter-Miser for 1966 will include a special 18-inch applicator disc attachment, mounted to the side of the present model. Besides doubling output capacity of the machine, the attachment is said to be ideal for use along fence lines as it sprays through to the opposite side of the fence. Operating in tandem the two discs spray a 72-inch swath of chemical formula in a single pass.

The Meter-Miser is an outgrowth of Amchem’s research into finding better, more effective and safer ways to apply industrial chemicals. The company’s latest development in this area resulted in the introduction of the “Spray-Disc” applicator, a centrifugally operated system for metering and applying invert-emulsion herbicides. Mounted on a helicopter, the device allows the pilot-applicator to apply these heavy drift-free adhesive-type herbicides with near-pinpoint accuracy.