

trimmings

CHEMICAL LABEL READABILITY has been questioned by the USDA and the Environmental Protection Agency. In a study conducted by the University of Illinois it was found that today's environmental protection chemical label is fairly difficult to read. In fact, it is suitable only for those with at least 10 to 12.9 years of formal education. It was reported that pesticide labels can be improved by changing type sizes, space between lines, color of print and background and type format. Lastly, the study concluded that the pesticide industry must take greater steps to make labels easier to decipher.

SOUTH DAKOTA RESEARCHERS have been busy sampling pesticide residues in wild ruminants (animals that chew the cud). They report traces of residues are widespread, but the levels are far below the Federal tolerances allowed for domestic livestock.

WHY DOES HERBICIDE performance vary? Dr. J. B. Weber of North Carolina State University reports that performance is tied into the reaction of the chemical with the various properties that make up a soil. All soil contain mixtures of sand, silt, clay, organic matter and other materials. One type of material generally predominates. He offers these rules of thumb on predicting herbicide behavior in soil:

1. Herbicides are more active on sands, or coarse textured soils. Increase the rate of herbicide as the texture of the soil becomes finer.
2. Herbicides are more active on mineral soils than on organic solid. As organic matter content increases in the soil, increase the rate of herbicide.
3. Volatile herbicides readily evaporate and must be incorporated in the soil to be effective.
4. Water soluble herbicides are more mobile and active in soils than insoluble ones. Use water soluble herbicides on mineral soils.

EPA'S RUCKELSHAUS has established policy for the protection and preservation of the Nation's wetlands. Just above everything that has non-flood waters covering it

for some period of a year is included. The policy is to minimize alterations in the quantity or quality of the natural flow of water, protect against additions or deletions of soil, solid waste, siltation, pesticides or toxic materials and prevent violation of water quality standards. No funds are to be granted for construction of municipal waste water treatment facilities which may interfere with the wetland ecosystem. The exception to this is where no other alternative or lesser environmental damage is found to be feasible. EPA will also consult with the Dept. of Interior in determining the probable impact of the pollution abatement program on fish and wildlife in the wetlands.

NORFOLK AND WESTERN RAILWAY is getting into the beautification business. In mid-March they planted 2,800 trees and seeded several embankments in the Norfolk, Va. area. Project was in cooperation with the Virginia division of forestry and the Virginia Dare soil and water conservation district.

Similar projects are being planned at several other locations across the 14 states served by the rail carrier.

SUPERWEED IS SPREADING. It's called *Kochia scoparia* or just plain cockia and it is one of the toughest, meanest and ugliest plants around. It can grow to a height of 10 feet along fences, although normal height is between three and four feet. It likes to live where there's plenty of salt, auto exhaust fumes, dust and cracks in concrete. And it is dispersed by large quantities of seed when the plants break loose in late fall and tumble in gusty winds. Here's another example of where weeds have adapted to man's environment.

GARY H. BAISE will continue as director of the Environmental Protection Agency's office of legislation, according to an announcement by William D. Ruckelshaus, EPA Administrator. He had been assistant to the administrator since 1970. Last January, a year ago, he was named director, office of legislation.

Stihl's Answer To Saw Safety

At least one major manufacturer of power saws is doing something about promoting safety among chain saw users. Stihl American, Inc. of Midland Park, N. J. has developed an unique safety chain brake that can stop a whirring chain instantly with no resultant damage. It provides safety in starting an engine, safety when cutting in the event of kickback, and safety when carrying.

Here's how the brake works. On most saws the chain begins to move when a centrifugal clutch engages with increased engine revolutions. At idle the clutch disengages and the chain stops.

Stihl's quickstop safety brake system features automatic disengagement of the clutch. Through the use of a hand guard, which actuates the system, the operator can deliberately stop the chain movement.

One quick push forward on the lever causes a cam located in the clutch cover to push a disk on the crankshaft slightly outward. This causes a steel pawl to release the disk and power between the engine and the chain is cut. A pre-tension brake engages the rim of the clutch drum and stops the chain. All this takes place instantly. The engine continues to run without stalling.

Broken down into fractions of a second the clutch disengages first. Then the brake is applied. Thus, with no power on the chain, minimum braking power is needed. It also means no stress on the crankshaft.

Pulling the lever back reverses the process. Brake is released, disk on the crankshaft is pushed back and steel pawl engages crankshaft with clutch. A built in safety feature requires the engine to be at idle speed before re-engagement of action on the chain.

This clever system can be used when starting the engine. Chain will not rotate even if the engine is at full throttle. Accidents from kickback are minimized by instantly stopping the chain. And for arborists in trees this feature adds an extra measure of safety in using a power saw. A chain that's not moving means less chance of accidental rope cuts.

Stihl says that the quickstop system will be available for most of their saws soon. It has also been designed to fit on existing professional models.