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Herbicide applicators for All Terrain Vehicles

LEE COBLE, BRUCE MAXWELL, and PETER FAY

Montana State University, Bozeman, MT

Leafy spurge is routinely found in rough terrain which is inaccessible to conventional herbicide application equipment. Ranchers are currently treating spurge in these problem areas by hand application of chemicals which prevents accuracy. All Terrain Vehicles (A.T.V.) equipped with herbicide applicators may provide better weed control in problem areas.

A granular spreader was fabricated for the A.T.V. This design utilizes a conventional garden spreader. The ground drive mechanism is converted to a rear wheel drive mechanism and the spreader is bolted to the rear A.T.V. rack. The drive mechanism can be engaged or disengaged by a spring lever. The spreader is easily calibrated.

A controlled droplet applicator (C.D.A.) was mounted on the A.T.V. using two C.D.A. sprayer heads (Micron Company) fastened to a 6-foot section of pipe which was clamped to the rear rack of the A.T.V. A 2-gallon hand pump sprayer tank served as the reservoir. Each flow line to the C.D.A. heads included a 7-pound check valve, a pressure regulator, and a gate valve. A 6-volt battery supplied power to the C.D.A. motors.

A front mounted rope wick was fabricated for the A.T.V. This design utilizes wick rope, inserts, and rubber stoppers from a kit available from the Monsanto Chemical Company. The wicks are supported in a wedge shape and interconnected to form a manifold. The wick bar is bolted to the front forks of the A.T.V. This mount is hinged at the forks to allow for height adjustment. A 2-gallon sprayer tank feeds the wick by gravity flow.

By using components currently available, herbicide applicators can easily be made for A.T.V's. These accessories can provide access and accuracy in chemically treating problem areas.