c) Tractor Mounted sprayer

This is a highly modernized equipment suitable for large scale farms above 20 acres. It is equipped with high precision systems giving full benefits of mechanization.



Figure 3: A tractor mounted spray pump



Compiled by: Ketiem, P., Kimutai, C., Wanyonyi, N., Thuo, M., Obanyi, J., Mureithi, I. and Lagat, R.

Editors: Nyabundi, K.W., Mukundi, K.T. and Maina, P.

Design and Layout: Nogrecia Mnene

For further information contact:

The Institute Director,
Agricultural Mechanization Research Institute (AMRI),
Katumani
P.O. Box 340-90100, Machakos, KENYA.
Email: director.amri@kalro.org

The Centre Director, KALRO Molo P.O Box 100-20106 MOLO Email: kalro.molo@kalro.org

KALRO Call Center: KALRO CALL CENTRE: 0111010100

KALRO/NAV CDP/BROCHURE No. 139/2024



Mechanization of Pyrethrum Pest and Disease Control Methods





This is the use of modern equipment such as, backpack, motorized and tractor mount sprayers, to manage weeds, pests and diseases.

Benefits of mechanised pest and disease control;

- Precise pesticide measurement and application, which reduces losses and waste, thereby minimizing pesticide inputs and costs.
- Reduced operator exposure to chemical pesticides, thereby decreasing cases associated with chemical toxicity.

Characterization of spray Pumps

A spray or sprayer pump is a force-pump fitted with a hose for drawing a liquid from a small tank and sending it in a fine spray over plants. Small pumps come in many forms and are operated by hand or small motors. Larger pumps for spraying large areas field crops are mounted on wheels and are operated by various forms of motors.

Pump	Category	Scale of use
Backpack	Small scale	Below 2 acres
Motorized	Medium scale	3-20 acres
Tractor	Large scale	Above 20
mounted	Lai ge scale	acres

a) Backpack sprayer

The type of sprayer is suitable for farmers with less than 2 acres. It is highly recommended for sloping fields



Operators with manual spray pumps

b) Motorized sprayer

This type of sprayer consist of a motor that enhances its efficiency and reduces cost of labour. It is highly recommended for relatively flat fields



Operator with a motorised spray pump

