

Backpack Spraying of ReMoa Tri® Triple-Action Insecticide

STANDARD OPERATING PROCEDURE (SOP) FOR THE U.S.A.

Version 1.1 | March 2024

Backpack and or hand-held ultra-low volume (ULV) applications can strategically target areas of special concern, areas of high virus transmission (hot spots), or where populations of mosquitoes are high due to abundant breeding habitats. ReMoa Tri can be applied as an ULV, non-thermal aerosol spray (cold fog) in mosquito adulticiding programs involving outdoor residential, urban, industrial, and recreational areas to control adult mosquitoes.

Application Parameters

ReMoa Tri can be applied between 0.34 – 1.02 ounces per acre. Do not apply more than 1.018 fl oz of ReMoa Tri per acre in any two-day period. Do not make more than 30 applications per site per year (for a maximum rate 30.54 fl oz of ReMoa Tri per acre per year). Before making the first application in a season, consult with the State or Tribal agency with primary responsibility for pesticide regulation to determine if other regulatory requirements exist. Local conditions will dictate the most efficient application rate and effective swath.

Recommended application rate for susceptible mosquitoes:

- Apply at 0.34 oz/acre – 0.66 oz/acre

Recommended application rate for permethrin-resistant mosquitoes:

- Apply at 0.67 oz/acre – 1.02 oz/acre

Dilution

ReMoa Tri is a "Ready-to-Use" (RTU) oil-based product and does not require dilution or agitation. However, when applications do require dilution, the product can only be diluted with the manufacturer's diluent, ReMoa Diluent™. Due to the unique properties of ReMoa Tri, other water or oil diluents cannot be used. ReMoa Tri should not be diluted more than 1:2 (product: diluent).

Application Equipment

Backpack or hand-held motorized sprayers should have a nozzle capable of delivering ULV droplets with sufficient projection. Thermal and non-thermal motorized backpack or hand-held spray equipment should be capable of generating ULV droplets with a volume median diameter (VMD) between 8- 30 microns ($8\mu\text{m} < Dv_{0.5} > 30\mu\text{m}$) and that 90% of the spray volume is contained in droplets smaller than 50 microns ($Dv_{0.9} < 50\mu\text{m}$). Equipment should also be capable of providing uniform coverage. Directions from equipment manufacturer should be

consulted for droplet size range and swath. Application equipment must be tested at least annually or when changing products to confirm that equipment pressure at the nozzle and nozzle flow rate(s) are properly calibrated, and droplet size is within required spectra.

Non-thermal (cold fog) ULV Application Recommendations:

Consult equipment manufacturer's instructions for application parameters. An example of a non-thermal ULV backpack sprayer capable of meeting specifications for ULV applications is the Fontan® PortaStar S Backpack (Swingtec, Isny, Germany). For example, to apply ReMoa Tri at 0.775 oz/acre, create a 2:1 dilution (ReMoa Tri: ReMoa Diluent) and apply at 1.691 oz/minute (using equipment manufacturer provided orifice #58) using a 300 ft swath at 2.4 mph walking speed.

Application Conditions:

Applications should follow label instructions. Applications should be conducted when mosquitoes are most active and weather conditions are conducive to keeping the spray cloud in the air column close to the ground. Apply when ground wind speeds are greater than or equal to 1 mph and when temperatures are above 50F.