envu® Range & Pasture

Applying Envu® Herbicides with RPAS: Best Management Practices

Where might drones fit?

Drone applications can be useful in remote or difficult-to-access treatment areas, or where minimizing ground disturbance is desirable.

- Steep terrain, coulees, riparian areas, and other difficult-to-access sites
- Native rangeland and pasture where minimizing vehicle traffic is desirable
- Spot treatments of invasive weeds, brush, or localized infestations
- Areas where minimizing soil disturbance, erosion risk, or damage to desirable forage species is beneficial

Always confirm that the intended use site is listed on the product label and follow all applicable buffer zones, drift mitigation measures and operating requirements.

Five factors that drive RPAS application success

1. Effective Swath Width (ESW)
   - Use validated ESW, not advertised swath width, for rate calculations and lane spacing.
   - Re-check ESW when the drone platform, nozzle or atomizer, height, speed or spray settings change.
2. Flight height
   - Maintain consistent height to support uniform deposition and predictable swath width.
   - Keep height as low as practical while maintaining safe operation and acceptable pattern uniformity.
   - Flight height should be determined during calibration and pattern testing and must not exceed 4 m above the target canopy.
3. Application rate
   - Delivered rate is driven by flow rate, flight speed and ESW.
   - Any change to one of these variables should trigger calibration verification.
4. Water volume and coverage
   - Use the labelled aerial carrier volume and enough water to achieve uniform coverage for the target.
   - Dense brush, canopy complexity and difficult targets may require extra attention to deposition and coverage.
5. Droplet size and drift management
   - Confirm the RPAS setup produces the spray quality required by the label and/or authorization.
   - Avoid conditions that increase drift risk, including unsuitable wind, gusts, rain or inability to maintain required buffers.

envu® Range & Pasture

Key application factors for uniform coverage, accurate rate delivery and drift management
Successful RPAS (drone) applications depend on validating the application system, not just selecting a product rate. The objective is to deliver the labelled rate uniformly across the treatment area while maintaining coverage and minimizing drift.

Before application

- Verify ESW, height, speed, flow rate, water volume, droplet size and buffer zones.
- Use an appropriate adjuvant when required. Always read and follow the product label.
- Document calibration settings, weather conditions and verification results.

Envu RPAS product quick reference

Product	Product Page	Use/Rate	Required Aerial Water Rate	Important Label Note
TruRange®		67.6 g, 135.2 g or 202 g/acre	3.2–5.3 US gal/acre for RPAS; minimum 3.2 US gal/acre for conventionally piloted aircraft	RPAS language includes maximum 4 m altitude above target canopy and consistent speed/height. For all TruRange applications compatible non-ionic surfactant @ 0.25-1% v/v or Adjuvant (MSO / Merge) @ 1% v/v is required.
Rejuvra®		151.8 mL/acre	Minimum 3.2 US gal/acre for conventionally piloted aircraft	For Crop Group 17 rangeland/pasture; apply before target annual weed germination and follow timing restrictions.

Reminder: The pesticide label is the legal document. Confirm that RPAS use is permitted for the specific product, site, target, tank mix and application scenario before application. Provincial authorization, licensing and certification requirements for pesticide application using RPAS may vary and should be verified before operation. This handout is a short stewardship summary and does not replace the label or Best Management Practices.

Scan to find your Envu® Range & Pasture Rep

envu® Range & Pasture