# Flupropanate Granular Herbicide



Targeted Feral Grass Control



# **Quick Guide**

# Flupropanate Granular Harbicida

**Active Ingredient:** Flupropanate

Formulation: 89.6 g/kg flupropanate as a granule

Pack Sizes: 750 g, 15 kg, 20 kg and 500 kg packs

Rate: 15-67.5 kg/ha

**Weeds Controlled:** African feathergrass (*Pennisetum macrourum*), African lovegrass (*Eragrostis curvula*), cane grass (*Eragrostis australasica*), coolatai grass (small patchy infestations) (*Hyparrhenia* spp.), couch (*Cynodon dactylon*), kikuyu (*Pennisetum clandestinum*), needle grasses (*Nassella* spp.), Paspalum (*Paspalum dilatatum*), serrated tussock (*Nassella trichotoma*), *Sporobolus* species, such as Parramatta grass (*S. africanus*), giant Parramatta grass (*S. fertilis*), giant rat's tail grasses (*S. pyramidalis* and *S. natalensis*), thatch/jaragua grass (*Hyparrhenia rufua*).

**Apply:** Spot application all year round; aerial applications Feb – Dec. Only one application per year.

**Application Method:** Aerial, ground and hand application.

**Re-seeding:** Pasture species such as phalaris, cocksfoot, ryegrass, red and white clovers, subterranean clovers and lucerne may be sown after at least 100 mm of rain has fallen.

**WHP:** Areas receiving blanket treatment are not to be grazed or cut for stock feed for 4 months after treatment. Areas receiving spot treatment are not to be grazed or cut for stock feed for at least 14 days after treatment. Stock are not to be grazed in treated areas for 14 days prior to slaughter. Do not graze lactating cows or goats in flupropanate treated areas.

**Residual Control:** Approximately two years, depending on local conditions.

**Mode of Action:** Group J: Inhibitors of lipid synthesis

**Resistance Management:** Group J herbicides are listed by Crop Life Australia as having a moderate resistance risk. There are isolated cases of weeds resistant to Group J in Australia. There are two populations of serrated tussock, six populations of giant Parramatta grass and ten populations of annual ryegrass that are confirmed resistant to Group J herbicides. To assist in delaying the onset of resistance, where possible rotate or tank mix Group J herbicides with herbicides from other modes of action. Use Group J herbicides at robust rates eg. the maximum label rates to ensure high levels of weed control particularly when targeting annual ryegrass.



Effective (Weed Control)



Australian (Owned & Manufactured)



No Waste



Easy to Dispose Packaging



**Precision Application** 



Holistic Approach

## **Targeted Feral Grass Control**

**GP Flupropanate** is a high quality herbicide granule for the control of giant rat's tail grass, Parramatta grass, giant Parramatta grass, serrated tussock, Chilean needle grass, African lovegrass and certain other invasive grasses.

These unpalatable grass weeds are exceptionally invasive in Australia where they have few natural diseases or insect predators. They produce huge numbers of seeds that are efficiently spread by wind, animals, vehicles etc. and may remain dormant in soil for years. These weeds already cover immense areas of eastern Australia, from far north Queensland to south-eastern South Australia.

	Sporobolus grasses*	Serrated tussock	Chilean needle grass
Longevity	10+ years	20 years	Many Years
Seeds Produced Per Year	85,000/m <sup>2</sup>	140,000/plant	20,000/m²
Seed Dormancy	10 years	20 years	4 years
Current Distribution	450,000 ha	1.1 million ha	SE QId To SA

<sup>\*</sup> Sporobolus grasses include giant rat's tail grass, Parramatta grass and giant Parramatta grass.

Livestock selectively graze more palatable species, allowing invasive grasses to increase in size and produce more seeds. Environment Australia reports that infested areas of serrated tussock may have a loss in production of up to 95%1; the Queensland Government reports losses of up to 80% from sporobolus grasses². Eradicating mature plants and establishing competitive pastures to prevent these grass seedlings from establishing is the only means of long-term control.

Invasive grass weeds often establish in timbered areas where they build up seed-banks which then disperse across neighbouring areas. Aerial application of herbicide is the preferred method of control because of the need to treat large pastoral areas; rough or steep terrain; and/or country that is timbered. Ground applications are not well suited to these conditions, tend to be expensive and labour intense and take a considerable amount of time.

When it comes to aerial application of herbicides, granules are the only formulation type to consider. Liquid herbicides can evaporate before hitting the ground, may drift off-target, damage trees and may not penetrate the tree canopy. Granule herbicides do not have any of these issues and can be applied by air with an even distribution pattern. They reach the soil surface where they remain intact until rain releases the active ingredient to control weeds that germinate with the same rain event. Given this ability to remain intact until rain arrives, granules have an extremely long window of application, a flexibility required when extensive areas are involved.

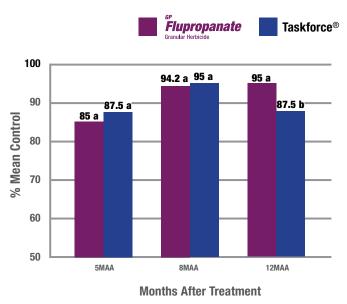
Flupropanate was identified as a key active ingredient in the fight against invasive grasses decades ago. It is still used today as it is the only chemical available for controlling certain species, and it continues to provide up to two years residual control, depending on soil type and rainfall.

**Granular Products** spent six years developing a flupropanate granule to meet Australian conditions and we remain the only manufacturer of granular flupropanate in Australia. There are approximately 400,000 granules per kg and so an application rate of 15 kg/ha delivers more than 600 granules/m². This prolific distribution ensures good coverage, even in difficult to access areas.

#### **Performance Through Innovation**

**GP Flupropanate** has been shown to be as effective as liquid formulations of flupropanate; providing equivalent control in the first months after application, whilst significantly better residual control at 12 months. (Results with the same letter are not statistically significant; those with different letters indicate significant differences.)

#### Control of Chilean needle grass



Taskforce is a Registered Trademark.

#### **How It Works**

Flupropanate is absorbed from the soil via roots. It inhibits a biochemical pathway associated with cell wall synthesis. It may take 2 to 12 months for complete control, depending on local conditions (rate used, plant density, plant size, rainfall, soil type, etc).

# Granular Products :::

Granular Products herbicides are ONLY available for purchase through approved specialist resellers ensuring expert local knowledge and service.

#### Our Rural Reseller Partners

**Granular Products** work closely with a team of skilled and experienced rural resellers who can assist you with control programs. Our specialist resellers live and operate locally, they understand the importance of timing, soil types, species and seasonality and can assist you with a management plan to suit your needs.

#### **Our Aerial Operators**

**Granular Products** Accredited Aerial Operators are experienced in the application of granular herbicides, they have specialised equipment to apply our products including a Transland Meter-Rate for fixed wing aircraft, combined with GPS guidance, data logging and pattern testing to maximise application efficacy.

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Rigorous quality assurance and environmental due diligence procedures are required to provide applicators with accreditation.

Accreditation requires: documented evidence of pattern testing results showing a co-efficient of variation of less than 10%; application supported by GPS guidance with data logging and download capabilities; current Aerial Agriculture Association of Australia Spraysafe accreditation, or equivalent; application by calibration, positively metered, variable rate equipment; and approval by *Granular Products Pty Ltd.* 

For further information, please contact:

### Granular Products :::

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References: 1. 2003, Environment Australia, Weed Management Guide, Serrated Tussock. 2. 2016 Queensland Government, Giant Parramatta Grass.

