ProGibb® SG
SMARTGRASS

Fills the Winter Feed Gap
What is ProGibb® SG

ProGibb® SG contains a natural plant growth regulator formulated as a unique low dose water soluble granule formulation for use in pasture farming systems.

By augmenting the natural level of gibberellins contained in plant tissue, it makes leaves grow longer and faster, thus creating significant gains in dry matter yield. This is particularly evident in the cooler months of the year (autumn through to spring) when pasture growth rates have naturally slowed.

For over 40 years ProGibb has been used in Australia for manipulating the growth of horticultural crops e.g. citrus, stone fruit and grapes, to improve yield, quality and marketability. This heritage makes Sumitomo Chemical Australia the clear leader in the field of plant growth regulators.

Advancing Pasture Management with ProGibb® SG

It is well documented that between 1500 kg and 2500 kg of good quality dry matter per hectare is the ideal pasture quantity to ensure optimum animal production.

With winter depletion of pasture a common occurrence in temperate pasture zones of Australia, it is important to maximise pasture growth to provide quality feed for meat and milk production.

Pasture depletion during cooler weather and cold soil temperatures affects farm income as a consequence of increased costs caused by supplementary feeding.

ProGibb SG effectively increases grass growth and feed quantity during periods of reduced winter pasture production.

Pastures growth rates for south west slope (kgDM/ha/day)
ProGibb SG is an advanced formulation containing 400 g/kg Gibberellic Acid (GA), a naturally occurring plant growth regulator (PGR) for pastures.

No other products can match the benefits of the patented SG formulation.

**Unrivalled Performance**

The advanced formulation means that the Gibberellin in ProGibb SG gets into the pastures grasses quickly and effectively to do its job. This means more grass faster!

A series of independently conducted field trials in Australia and New Zealand have consistently demonstrated the higher dry matter production figures achieved by using ProGibb SG over generic liquid GA products and particularly over 900 g/kg non soluble powder formulations illegally imported into Australia. While a visual response can be seen from all GA products, only measuring the actual dry matter production really tells the story.

When the additional kgs of dry matter produced per ha (over the untreated control) from the first cut after application was compared over a series of trials, the added benefits of ProGibb SG were clear.

<table>
<thead>
<tr>
<th></th>
<th>Additional 72 kg dry matter/ha</th>
<th>Additional 189 kg dry matter/ha</th>
<th>Additional 107 kg dry matter/ha</th>
</tr>
</thead>
<tbody>
<tr>
<td>ProGibb SG vs Liquid GA 1</td>
<td>ProGibb SG vs Liquid GA 2</td>
<td>ProGibb SG vs Powder GA</td>
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This additional dry matter produced by ProGibb SG over other GA products more than pays for the cost of the ProGibb SG, including application costs!*

* Based on pasture dry matter ME of 11 mj/kg, pasture utilisation efficiency of 75% and a milk conversion rate of 5 mj/L and a farm gate price of 35 cents/L for milk.
Grow more pasture fast

ProGibb SG stimulates plant growth by stimulating cell expansion which results in leaf and stem elongation. Applying ProGibb SG to freshly grazed pastures leads to rapid foliage growth.

Visual responses can often be seen in 7 days although maximum dry matter production does not occur for 3-4 weeks. Commercial demonstrations have shown increases in dry matter ranging from 30 to 60%.

Reduce supplementary feeding

The use of ProGibb SG can significantly reduce the cost of supplementary feed. When comparing the cost of supplementary feed sources, ProGibb SG stands out as one of the cheapest and easiest options available.

The cost of feed from an application of ProGibb SG giving a 400 kg/ha DM response is **0.45 cents/megajoule ME** (based on an average temperate pasture of 11 megajoules ME/kg with the ProGibb SG costing $20/ha).

In example below, the extra feed is well over 3 times cheaper than other supplementary feed options.

<table>
<thead>
<tr>
<th>Forage</th>
<th>ME (Mj/kg)</th>
<th>$/tonne</th>
<th>Cents/megajoule ME</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lucerne hay</td>
<td>9</td>
<td>280</td>
<td>3.11</td>
</tr>
<tr>
<td>Clover hay</td>
<td>8.5</td>
<td>250</td>
<td>2.94</td>
</tr>
<tr>
<td>Oaten hay</td>
<td>8.7</td>
<td>250</td>
<td>2.87</td>
</tr>
<tr>
<td>Wheaten straw</td>
<td>6.1</td>
<td>120</td>
<td>1.97</td>
</tr>
<tr>
<td>Wheat</td>
<td>12.5</td>
<td>250</td>
<td>2.00</td>
</tr>
<tr>
<td>Triticale</td>
<td>12</td>
<td>200</td>
<td>1.67</td>
</tr>
<tr>
<td>Barley</td>
<td>12</td>
<td>210</td>
<td>1.75</td>
</tr>
<tr>
<td>Oats</td>
<td>11</td>
<td>180</td>
<td>1.64</td>
</tr>
<tr>
<td>Lupins</td>
<td>13.5</td>
<td>300</td>
<td>2.22</td>
</tr>
</tbody>
</table>

Holbrook NSW – 20 g/ha (18 DAT)

Holbrook NSW – 10 g/ha (18 DAT)

Holbrook NSW – Untreated (18 DAT)
Easy, Efficient and Productive...

Cheapest way to grow extra feed

... and compliments a fertiliser program

**Multiple applications**

Whilst a single low cost application well below $20/ha can generate 30-60% more dry matter within 3 weeks of application, it is via multiple applications of ProGibb SG that significant responses are achieved from autumn through to spring.

In rotational grazing systems, ProGibb SG can be applied after each grazing to increase dry matter production during the next ‘round’.

Many farmers have found that they are able to reduce their ‘round time’ in response to the extra feed made available by applying ProGibb SG after each grazing.

**ProGibb SG for stimulation of winter dormant pastures**

**Application with fertiliser**

Maximising pasture production means maintaining good pasture nutrition and pastures that are well nourished respond best to applications of ProGibb SG. ProGibb SG is not a replacement for fertiliser.

Trials have consistently shown that the use of ProGibb SG in conjunction with nitrogen based fertilisers results in complementary and additive growth responses.

ProGibb SG is compatible with many liquid nitrogen based fertilisers, such as EASY N®. Combining the two products in one application saves on time and money, and is now a standard practice for many Australian farmers.

**Use in conjunction with urea**

Annual ryegrass day matter production (kg/ha)  
27 DAT Ardmona Victoria 2005

<table>
<thead>
<tr>
<th>Rate</th>
<th>kg DM/ha</th>
</tr>
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<tbody>
<tr>
<td>UTC 20 g/ha</td>
<td></td>
</tr>
<tr>
<td>20 g/ha</td>
<td></td>
</tr>
<tr>
<td>Urea 80 kg/ha</td>
<td></td>
</tr>
<tr>
<td>20 g/ha + Urea 80 kg/ha</td>
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</table>
Withholding Periods

<table>
<thead>
<tr>
<th>Grazing Withholding Period</th>
<th>Nil</th>
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<tbody>
<tr>
<td>Milk Withholding Period</td>
<td>Nil</td>
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Milk Processors Approval

Milk processors across Australia approve the use of ProGibb SG as a farm input as no residues occur as a result of using ProGibb SG.

EASY N

No other formulation has been proven to be as compatible with liquid nitrogen fertilisers such as Easy N. Trials have consistently shown that the use of ProGibb SG with Easy N liquid nitrogen fertiliser results in complementary and additional growth responses.
What you can expect after applying ProGibb SG

ProGibb SG will increase pasture DM production within three weeks of application. In commercial demonstrations of ProGibb SG over a 3 year period, increases in dry matter ranged between 30 and 60%.

Applying ProGibb SG to freshly grazed pasture stimulates cell expansion. This results in rapid foliage growth occurring for between 3 to 4 weeks after application.

The amount of dry matter production is dependent on the amount of available soil moisture and nutrients needed to sustain the accelerated growth.

It is normal for sprayed pasture to take on lighter appearance (greeny-yellow as opposed to dark green) as a result of the rapid dilution of chlorophyll but this effect disappears within 14-28 days. This visual response does not affect pasture quality.

ProGibb SG treated pastures take on a more upright and even appearance.

ProGibb SG has little effect on the growth of broad leaf pasture components.

What pastures are suited to

- Application is well suited to rotational grazing systems
- ProGibb SG performs best in high producing ‘clean’ pastures
- ProGibb SG should not be applied to pastures during establishment
- ProGibb SG should not be applied to pastures containing rank growth
- A pasture base of at least 1000 kg DM/ha is recommended prior to the application of ProGibb SG
- Drought affected pastures need to be fully recovered prior to the application of ProGibb SG
- Applications of ProGibb SG during frost events should be avoided until pasture has recovered
- Adequate soil moisture and nutrients need to be available to support the additional pasture growth (Note: ProGibb SG is not a fertiliser or a fertiliser substitute)

Photograph of commercial demonstration Hamilton Victoria
ProGibb SG on Ryegrass and clover sheep pasture increased growth by 1043 kg / ha
**Quick reference guide**

<table>
<thead>
<tr>
<th>Packaging</th>
<th>250 g plastic bottle</th>
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<tbody>
<tr>
<td>Application Rate</td>
<td>10 g to 20 g/ha</td>
</tr>
<tr>
<td>Water Rate</td>
<td>100 L/ha</td>
</tr>
<tr>
<td>Withholding Period</td>
<td>Nil grazing withholding periods for both milk and meat</td>
</tr>
<tr>
<td>Tank Mixing</td>
<td>ProGibb SG is compatible with a range of insecticides, herbicides, adjuvants and liquid N fertilisers. The addition of a wetting agent/surfactant may help coverage and/or penetration e.g. on some waxy cuticle winter grasses</td>
</tr>
<tr>
<td>Pasture Capability</td>
<td>Pasture must be in a growing state and have adequate soil moisture and fertility to sustain additional growth prior to application</td>
</tr>
<tr>
<td>Pasture Status</td>
<td>Pasture should be generally weed free and pest and disease free</td>
</tr>
<tr>
<td>Pasture Species</td>
<td>Grass pasture species including forage cereals. ProGibb SG will have little effect on the growth of broad leaf pasture components such as lucerne or clover</td>
</tr>
<tr>
<td>Application Temperature</td>
<td>Best results are achieved when average soil temperatures are above 5 degrees (as measured at 10 cm depth at 9 am)</td>
</tr>
<tr>
<td>Application Timing</td>
<td>Following grazing and a minimum pasture base of 1000 kg/ha is recommended</td>
</tr>
<tr>
<td>Consecutive Applications</td>
<td>Single application: Application can be made between May (or when pasture growth rates begin to slow) and September (or when pasture growth rates rapidly accelerate) Multiple applications: Multiple applications can be at 3-4 week intervals</td>
</tr>
<tr>
<td>Grazing After Application</td>
<td>Treated pasture should be rested for 21 days prior to grazing and grazed no later than 28 days after treatment</td>
</tr>
</tbody>
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**FOR FURTHER INFORMATION CONTACT:**

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