EQUINE PASTURE ADVISOR

- PASTURES FOR AUSTRALIAN HORSE PROPERTIES -

pasturegenetics.com
In most of Australia, we are very fortunate in that we can grow pastures for our horses year round. A well-managed horse pasture can be productive, provide nutrients naturally and excellent weight gains. They are also relatively cheap to maintain in comparison to the continual purchase of hard feeds.

This advisor is for horse owners wanting to increase paddock production and pasture establishment success in an industry that is dominated by supplementary feeding.

1. **SOIL TEST - STARTING POINT**
   We recommend you obtain a complete soil test before you start on any new pasture improvement program, as your soils are the key to your success. Enquire with your local agronomist or rural supply outlet about conducting a soil test and developing a pasture plan. This will provide you and your agronomist a benchmark to work from and fine tune a program suited to your property’s needs.

2. **HERBICIDE CARRY OVER**
   Please be mindful if you are going into a pasture program in the future as some herbicides have a very long plant back period of over 9 months, but this can be up to 18 months on some paddocks. This includes Simazine at least 9 months and Glean is 18 months.

3. **WEED CONTROL**
   Weed Control is another important element in establishing horse pastures. You want to reduce the weed burden as much as possible, as unwanted weeds in paddocks cause more issues with your horses health than any pastures will.

   A two year weed control plan works best to eliminate unwanted weeds and allow the newly establishing pasture to grow to its full potential without competition.

   Please see or discuss your weed issue and plans with your local agronomist.

   A knockdown spray may be required prior to sowing as rain can promote weed germination.

   Work with your agronomist on the best solution and Stock Withholding Periods. (Stock Withholding Periods are the number of days which stock are not allowed to graze the pastures and or be withheld from sale for meat consumption re: beef cattle and lambs). Export slaughter intervals are similar, but are an additional time period in which the animals, being sold for meat consumption must graze on clean feed – (Unsprayed).

   Weeds which can effect horses health include Crofton Weed, St John's Wart, Marshmallow, Ragwort, Paterson's Curse, Castor Oil Plant, Black Nightshade, Hemlock and Bracken Fern.

   Poor planning before pasture renovation can lead to results like this. In the establishment phase we see the weeds dominate the actual sown pasture varieties, barley grass, shepherds purse, capeweed and wireweed.

   Good weed control prior to seeding will allow for a good, clean, established, long term pasture.

   Being a good horse manager also means being a good grass farmer.
4. SEED QUALITY
Always purchase high quality seed from a known seed company such as Pasture Genetics from your local rural supplier.

For maximum establishment, it is recommended you have your seed protected with XLR8 treatment, which provides faster growth and protection from insect damage in the germination phase of your pastures.

5. PASTURE BLENDS AND CLOVER RATIOS
Pasture Genetics provides pre-blended Sowsmart Equine blends for different environments and requirements; we also provide custom blends to suit any situation. Please refer to page 12 of this Advisor for blends.

The best ratio to work from is 75-80% grasses and 20-25% clovers. The 80% grass base is for roughage purposes, with low sugar contents, but enough to provide sustained energy. Low sub clovers are a good alternative to white clovers in long term blends.

6. SOWING TECHNIQUES
The sowing of equine pastures, using a direct Drill or Tyne Seeder is recommended as they provide the best seed to soil contact to allow full germination. Narrow row spacing of 7 inches is preferred, to allow for full ground cover by pasture species, therefore reducing any potential weed invasion in wide seeding rows.

Sowing in the autumn is the ideal time as this is the best opportunity for natural rainfall. If you have the ability to irrigate or have more summer dominant rainfall this may also be an option with seeding of specific blends. If you don’t own your own sowing equipment, talk to your local rural store that will be able to provide you with the details for contractors who are available in the area.

7. SEEDING DEPTH
The depth of seeding is critical for good establishment of pastures, don’t plant too deep, 10 - 12mm is ideal.

Often press wheels or light chain to point harrows will improve germination through better seed to soil contact.

We recommend you obtain a complete soil test before you start on any new pasture improvement program, as your soils are the key to your success.

<table>
<thead>
<tr>
<th>NUTRIENT REMOVAL</th>
<th>AMOUNT REMOVED IN 1 DM T OF HAY</th>
<th>SEASONALLY IN 10 DM T/HA OF HAY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nitrogen (N)</td>
<td>25 -30kg</td>
<td>300kg</td>
</tr>
<tr>
<td>Phosphorus (P)</td>
<td>3-4kg</td>
<td>40kg</td>
</tr>
<tr>
<td>Potassium (K)</td>
<td>25-27kg</td>
<td>270kg</td>
</tr>
<tr>
<td>Sulphur (S)</td>
<td>2-3kg</td>
<td>30kg</td>
</tr>
<tr>
<td>Calcium (C)</td>
<td>7-9kg</td>
<td>90kg</td>
</tr>
<tr>
<td>Magnesium (Mg)</td>
<td>1-2kg</td>
<td>20kg</td>
</tr>
</tbody>
</table>

The table above is a guide to nutrient removal that can help to target what you need to resupply to maintain high pasture performance.

NUTRIENT REMOVAL AMOUNT REMOVED IN 1 DM T OF HAY SEASONALLY IN 10 DM T/HA OF HAY

Nitrogen (N) 25 -30kg 300kg
Phosphorus (P) 3-4kg 40kg
Potassium (K) 25-27kg 270kg
Sulphur (S) 2-3kg 30kg
Calcium (C) 7-9kg 90kg
Magnesium (Mg) 1-2kg 20kg

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8. SEEDING RATES

<table>
<thead>
<tr>
<th>PLANTING SITUATION</th>
<th>GRAZING OR HAY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dryland</td>
<td>15 – 20Kg/ha</td>
</tr>
<tr>
<td>Irrigation</td>
<td>25 – 30Kg/ha</td>
</tr>
</tbody>
</table>

These rates are averages and depend on soil type and environment.

9. FERTILISER – FUEL FOR YOUR PASTURES

Another key component to any successful pasture establishment is the fuel to drive the plants growth. In this case we use fertiliser. The type of fertiliser you use will be determined by your soil tests. As fertilisers provide major nutrients to the plant, above what the soils can provide. Fertilisers come in many forms such as granular (Starter 15 – DAP or MAP), liquid or foliar applications (Pasture - Masta – Cal Tech) and manure (Chicken or Turkey), see your local agronomist for your best option. It is critical to look at your soil as a bank for plant nutrients. What you remove by hay cutting, silage and to a lesser degree grazing, needs to be returned with pasture topdressing of fertilisers. To keep your production of high quality feed achieving the best results, we recommend regular plant tissue and soil testing. This will allow you to specifically target the nutrients that are required. Healthy pastures not only supply you with high dry matter and quality feed, but more importantly keep healthy plants growing to reduce weed pressure and long term persistence of plant species.

10. INSECT CONTROL

The use of the XLR8 Seed Treatment will protect your germinating pastures from insect damage for up to 4 weeks. Chlorpyrifos insecticide can be applied to the soil in furrows at planting or spread over the soil surface after seeding. Monitor your newly establishing pastures for insects.

IT IS RECOMMENDED YOU CARRY OUT A PADDOCK INSPECTION FOR INSECT DAMAGE ON A REGULAR BASIS.

If you are unsure of what to look for or do, please contact your local agronomist.

11. SUCCESSFUL GRAZING MANAGEMENT TIPS

As these pastures are perennial types, they are slower to establish, expect a time frame between 3-4 months before actual grazing by horses. It is critical that the plants anchor their roots enough that an animal grazing will not pull the entire plant out of the ground. We use a root pull test, where by you grab a handful of grass and pull on it as it would be eaten like a horse. If the entire plant pulls out in your hand then it is way too early to graze. If the leaves break away, and the roots lift a little, but not all the way out of the ground, leave it another couple of weeks before retrying the pull test.

If you pull on the leaves and only the leaves break cleanly away in your hand, then it is right to graze. All grasses should be over 150mm in height before attempting this. Only graze lightly on the first graze to take the tips of the plants off. Do not graze the plants below 50mm in height and leaving some remnants of the base of the leaves still attached to the stem. Grazing below this point will cause the pastures to decline very quickly, causing open ground with the potential for Colic and weeds to establish.

Always have the ability to rotate a horse or horses through paddocks. This will provide longevity of the pastures, but will also aid in worm control and overall horse health. Always allow your pastures to regrow to 150 mm at a minimum before re grazing occurs.

The pastures are designed to work year round, but some grasses are dormant at certain times of the year. Do not expect all grasses to be working all the time, e.g. ryegrasses and some clovers in the summer. Some summer active grasses will be dormant throughout winter.

The key to successful horse pastures is light rotational grazing.

You have good control of the pasture height and this in turn will lead to pastures lasting more than three to four years.

12. SUCCESSFUL CUTTING OF EQUINE PASTURES FOR HAY

Do not cut newly established pastures for hay in the first season (12 months). While you may be tempted to do this, let the grasses seed down in the first year to provide you with a good seed bank, to ensure long term survival. This especially applies to clovers, if they are not allowed to set seed in the first 12 months, they will disappear very quickly out of your pasture system.

If cutting hay from year two onwards, cut just prior to or at the first sign of flowering of the clovers, but ensure there is irrigation water available afterwards to allow regrowth and seed set.

13. MANAGEMENT POINTS FOR IRRIGATED EQUINE PASTURES

When establishing your pastures, monitoring your soil moisture is critical, for the best results. Maintaining a good moisture profile leading into May, will safe guard the pasture before winter.

On flood irrigation, be mindful of drowning small establishing grasses and legumes, if the watering time is longer than 12 hours. (Water on and off the bay). Ideally water will be on and off in less than 8 hours, but this will depend on the bay length and soil moisture level.

Once the water is turned back on in the autumn, please continue to monitor your soil moisture, as an
Early watering may be required. Watering intervals will vary from season to season and property to property. The general guideline would be watering every 10 – 16 days at the height of spring and summer. Do not water if the temperature is likely to go over 40 degrees on that day.

Always check the paddock for waterlogged or boggy patches after watering. Do not place horses or any animals back on the paddock for a minimum of 5 days until walkable without causing any damage to the soils and or sticking to your boots. This time frame will once again depend on the soil types you have on your property and the weather at that time.

14. **Always Consider Your Horses Health**

Always vaccinate your horses with 2-1, which helps to protect horses from Tetanus and Strangles in a yearly program. Please see your veterinarian or local produce store about the vaccination procedure.

Uncleaned and long pastures can lead to worm burden issues. Clean your paddocks regularly, via a shovel and wheelbarrow or for larger operations via manure pick up machines either vacuum or brush type machines.

Always provide a clean water source for your horses as they can get sick from dirty or contaminated water. Always provide your horses with mineral licks or blocks to cover for any nutrient and mineral deficiencies that may occur throughout the year.

If your horse seems irritated or has lost its appetite whilst grazing pastures, please consult your veterinarian as situations can become life threatening with horses very quickly.
Goldstrike® XLR8® Seed Treatment

The XLR8® seed treatment package utilizing Gaucho 600FS, has been used successfully over many years. Pasture Genetics are always looking at new technology to help bring even better performance to our leading forage products. The new insecticide package Poncho Plus® is such advancement in the seed treatment market. The XLR8® treatment will now include Poncho Plus® as the main insecticide utilised as part of this package, which is applied directly to pasture grasses and legumes. Over many years research has confirmed that the addition of an insecticide to the seed before sowing significantly benefits the plant during establishment and early growth. The XLR8® treatment will protect emerging seedlings for 3-4 weeks after sowing against sucking and biting insects, like Red legged earth mites (RLEM) and Blue oat mite (BOM). The additional protection now with Poncho Plus® offers grass pastures protection from Cutworm, Yellow headed cockchafer, and African black beetle. Broadleaf pasture will also notice additional protection from Cutworm. Poncho Plus® also offers suppression against lucerne flea in grass, broadleaf and brassica pastures. This time period is critical for seedling establishment, and reducing the impact from insects is a key to successful pasture production. The benefits from XLR8® not only comes from the insect protection, but has also shown long term benefit with early seedling plant growth. This has been demonstrated with stronger root systems in seedlings, leading to higher overall pasture establishment and long term pasture production. The success with high plant populations is critical to firstly reduce impact from in crop weed infestations and leads to longer term biomass production. The XLR8® seed treatment comes standard on Pasture Genetics forage Brassicaceae, Herbs, Phalaris, Sub tropical grasses and Premium Proprietary lucerne lines. These plants have demonstrated excellent seedling performance when XLR8® has been applied. This has led to quicker seedling vigour and rapid growth in the critical establishment phase. The XLR8® Seed treatment can be applied on request to all seed products where registration is applicable.

PONCHO® PLUS COMPARISON CHART

<table>
<thead>
<tr>
<th></th>
<th>Seed Treatment</th>
<th>Base Seed &amp; Foliar Spray</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>Poncho Plus Broadleaf</td>
<td>Gaucho®</td>
</tr>
<tr>
<td></td>
<td>Pasture</td>
<td>Chloropyrifos</td>
</tr>
<tr>
<td></td>
<td>Poncho Plus Grass</td>
<td>Dithiocarbamate</td>
</tr>
<tr>
<td></td>
<td>Pasture</td>
<td>Dimethoate (alpha cypermethrin)</td>
</tr>
</tbody>
</table>

Redlegged Earth Mite ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓
Lucerne Flea ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓
Blue Oat Mite ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓
Cutworm ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓
Yellowheaded Pasture Cockchaffer ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓
African Black Beetle ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓
May offer Stress Shield™ benefits ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓
Up to 4 weeks systemic protection for emerging seedlings ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓
Protection against some soil pests ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓
Low Impact on beneficial species ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓
Targeted chemical placement ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓

Goldstrike® is the premium seed treatment in the Australian market. The treatment process and technical advances with Goldstrike® are ongoing. Pasture Genetics Goldstrike® seed treatment range comes standard with the Nutrient Enhanced package. It includes a complete starter package with macro and micro nutrients.

- More reliable and stronger stand establishment
- Proven effective nodulation and nitrogen fixation
- Tougher, more durable protective seed coating
- The ultimate in convenience, flexibility and confidence
- XLR8 insecticide available on request.

PASTURE GENETICS SETS NEW BENCHMARK

1000 viable Rhizobia per seed on stored lucerne after 12 months and Medic and Sub Clover, after 6 months.
MOBY FORAGE BARLEY IN DEMAND FOR HORSE CLIENTS

The excellent hay characteristics of Moby forage barley has made it in demand by horse owner clients of Trevor Schulz, who grows the crop each season on his property at Lowood, in the Somerset region of south-east Queensland.

Mr Schulz said Moby makes excellent quality hay and is well liked by his customers. “A lot of people like it for horses and cattle because it is beardless,” he said. “It doesn’t get stuck in the mane or hair like other ones.”

Trevor Schulz of Lowood, QLD, has had excellent feedback from customers who use hay made from Moby forage barley.

MOBY FORAGE BARLEY

(Hordeum vulgare) EL

RECOMMENDED TIME TO PLANT APRIL ONWARDS

<table>
<thead>
<tr>
<th>Maturity</th>
<th>Min Rainfall (mm)</th>
<th>SEEDING RATE kg/Ha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early</td>
<td>350</td>
<td>Dryland: 60 - 80</td>
</tr>
<tr>
<td></td>
<td></td>
<td>High Rainfall/Irrigation: 80 - 120</td>
</tr>
</tbody>
</table>

Moby is an early maturing, 6 row, white seeded awnless barley with excellent winter growth and rapid establishment. Leaf size is more comparable with oat varieties than traditional barley types.

Moby will tolerate multiple grazings until the production of the first node and offers an extended sowing window. Seedling vigour in Moby is exceptional and Moby has shown significant versatility, adapting to a large range of sowing conditions and environments.

Disease resistance appears typical of other commercial barley cultivars with good net blotch resistance, adequate field leaf scald and spot blotch resistance.

- Selected for white seed heads, making for a more versatile crop in the broadacre market, where black seeded barleys such as Dictator have contamination issues.
- Developed for high vegetative dry matter production.
- Very fast establishing variety.
- Exhibits good cold tolerance.
- Excellent winter growth.
- Slightly earlier than Dictator.
- Replaces hand feeding during the winter period.

MOBY HAY, SOFTNESS WITH A SWEET SMELL

As an early awnless variety, Moby forage barley was planted on Keith and Kellie Horne’s Property in the Hunter Valley, NSW. Sown at 80kg/ Ha the Moby forage barley provided winter feed for cattle as a grazing option and then locked up to make quality horse hay in early October.

The Moby was made in both large round and small square bales to suit their needs as horse owners, and to sell off to other horse properties in the area.

Keith said, “We were very happy with the quality of the hay and its softness.” Kellie said, “It has a sweet smell about it that the horses love.”

Keith and Kellie planted 4 Ha this year and plan to double that area next year on the performance that Moby has shown them this year.

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OUTBACK
FORAGE OATS

(Avena sativa) EXL
Maturity Mid-Late
Min Rainfall (mm) 400
SEEDING RATE kg/ha
Dryland 60 - 80
High Rainfall/Irrigation 80 - 120

Outback oats provide higher yields of quality grazing throughout the critical autumn, winter and early spring grazing periods. Outback forage oats will come XLR8 treated. This protection aids in the early control of aphid feeding damage and helps with management of Barley Yellow Dwarf Virus (BYDV). Early seedling growth responses from XLR8 also allows for quick establishment of the Outback Forage Oats.
- Excellent early plant option for northern NSW and QLD districts
- Medium height, erect specialist hay and grazing oat
- Mid - late maturity
- High forage quality and total yield
- Dark green broad leaves
- More rapid establishment, shows excellent seedling vigour
- Better moisture stress tolerance
- Suited to a wider range of soils
- Excellent frost resistance
- Comes standard with Gauchio Insecticide Treatment

PENFIELD RESEARCH STATION
LIVEWEIGHT GAIN TRIAL 2011
- Trial sown: 29/4/11
- 12 x ½ Ha blocks sown; 6 sown to Outback Forage Oats, 6 sown to Moby Forage Barley
- Both cereals sown @ 100kg/ha
- Grazing start date: 24/6/11
- Grazing end date: 25/10/11
- Total trial length: 18 weeks (126 days)
- 20 Hereford steers used with an average weight of 232kg
- 3 x 6 week grazing rotations
- Each 6 week rotation consisted of each ½ Ha block being grazed for 3.5 days each
- Dry matter measurements taken before and after grazing with electronic pasture probe
- Looking to explore differences in seasonal production and available feed over feed shortage periods and into peak growing season
- No other feed or supplements were supplied to the animals

EXPECTED GROWTH HABIT OF MOBY BARLEY AND OUTBACK OATS OVER A GROWING SEASON

TOTAL GROWN IN 5.5 WEEKS BETWEEN GRAZING (DM T/HA)

<table>
<thead>
<tr>
<th></th>
<th>1st Grazing</th>
<th>2nd Grazing</th>
<th>3rd Grazing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moby</td>
<td>2.7</td>
<td>1.4</td>
<td>1.4</td>
</tr>
<tr>
<td>Outback</td>
<td>1.6</td>
<td>1.3</td>
<td>1.8</td>
</tr>
</tbody>
</table>

AVERAGE WEIGHT GAIN OVER 18 WEEK TRIAL PERIOD (KG/DAY)

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Moby</td>
<td>1.26</td>
<td>1.24</td>
<td>0.85</td>
</tr>
<tr>
<td>Outback</td>
<td>0.91</td>
<td>0.96</td>
<td>1.50</td>
</tr>
</tbody>
</table>

TOTAL GROWTH COMPARISON (DM T/HA)

<table>
<thead>
<tr>
<th></th>
<th>ACTUAL</th>
<th>EXPECTED TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moby</td>
<td>(20 week trial)</td>
<td>(full season)</td>
</tr>
<tr>
<td></td>
<td>5.5</td>
<td>9.6</td>
</tr>
<tr>
<td>Outback</td>
<td>4.7</td>
<td>13.7</td>
</tr>
</tbody>
</table>
**Q31 LUCERNE**

Winter dormant (Medicago sativa) | EGX
---|---
Winter Activity | 3
Min Rainfall (mm) | 450
SEEDING RATE kg/ha | 4 - 8
Dryland | 10 - 20
Hay production | 25 - 30

Consult your local agronomist for area specific recommendations.

Q31 is the leading hay and chaffing variety for the premium horse feed markets.

**GTL®60 NEW LUCERNE**

Winter active (Medicago sativa) | EGX
---|---
Winter Activity | 6
Min Rainfall (mm) | 350
SEEDING RATE kg/ha | 4 - 8
Dryland | 10 - 20
Hay production | 25 - 30

Consult your local agronomist for area specific recommendations.

The new grazing tolerant Lucerne GTL®60 was selected for broad and low set crowns to handle heavy grazing from livestock.

**EXCELLENT YIELDS AND QUALITY FROM Q31 LUCERNE AT COWRA**

Q31 lucerne is providing excellent yields and quality for James Rayner, at Cowra, in the central west region of New South Wales. Mr Rayner said they had stands of the variety that were three and four years old and performing particularly well under a range of seasonal conditions.

He said he had been drawn to Q31 after reading about it and tried a paddock, even though there was not a lot of it being grown in the area at the time.

The following year’s results were very good, with Q31 consistently producing small square and large square lucerne bales of a very high quality.

Approximately two thirds of the hay cut goes into small square bales, which are sold into produce stores and to horse studs on the outskirts of Sydney.

It demonstrates greater persistence than winter active varieties, when persistence is more important than winter growth. Q31 is ideally suited to irrigation and dryland pastures in cold climate areas. The superior leaf retention trait leads to improved quality lucerne to be sold into premium markets. Q31 was bred for specialist irrigated haymaking, silage or chaff where premium quality is required and where hay cannot be made in winter.

- Q31 has quickly been adopted as the leading hay and chaffing variety for premium markets
- Q31 has a superior leaf retention trait and the highest nutritive value in retained leaf in feed and hay, combined with high yields and excellent quality for hay, chaff, silage and grazing
- It demonstrates greater persistence than winter active varieties, when persistence is more important than winter growth
- Q31 was bred for specialist irrigated haymaking, silage or chaff where premium quality is required and where hay cannot be made in winter
- Ideally suited to leaders in forage quality
- Comes standard with Goldstrike® XLR8 Longlife treatment – (Poncho® Plus insecticide)
- Better option than 54Q53, WL342HQ-MF, Cimmaron, Prime

- (Poncho® Plus insecticide)
- Comes standard with Goldstrike® XLR8 Longlife treatment
- Better option than Stamina GT6

The parent germplasm was tested under an arduous series of strict grazing protocols over a number of years. This enabled tolerant parent plants to prove their integrity and expression of true grazing tolerant characteristics, to meet the criteria of the grazing tolerant lucerne GTL®60 trial protocol. The final stage of testing was a 3 year grazing trial where it was grazed on a 3 week set rotation. This continuous stress load put immense pressure on all the candidate lines and was very quick to expose lines with minimal tolerance. The 3 year time frame was set up to simulate traditional Australian practices where the expectation on plant survivability was more than 3 years and beyond. Bred in Australia, GTL®60 is ideal for extensive graze farming where rotations cannot be as rigorously implemented as in more intensive rotation systems. GTL®60 is the first growing tolerant lucerne to be released from the Pasture Genetics program, having originated from such a strict and lengthy selection and trialling criteria system to specifically prove grazing tolerance in lucerne.

- Selected for a broad and low set crown, high forage values, high ruminant palatability with high disease and pest resistance ratings
- Tested under an arduous series of strict grazing protocols over a number of years
- Ideally suited as a dual-purpose variety for grazing & hay operations
- Retain leaf through the drying and baling process
- GTL®60 has demonstrated excellent grazing tolerance with 74% residual plants measured after 3 year grazing trial
- Comes standard with Goldstrike® XLR8 Longlife treatment – (Poncho® Plus insecticide)
- Better option than Stamina GT6

The remainder is harvested into large squares for cattle and also to supply a local chaff mill.

Mr Rayner said the feedback from their customers had been very positive with Q31 consistently producing bales that are green in colour and full of leaf.

“It has very good quality,” he said. “I’m happy.”

“Q31 also seems to yield very well,” he said. “It puts most of its growth in the summer months, when they cut their premium hay.”

JAMES RAYNER, OF COWRA, NSW, IN Q31 LUCERNE WHICH HAS PRODUCED EXCELLENT YIELD AND QUALITY
### PASTURE GRASSES

#### RYEGRASS & MILLET

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<thead>
<tr>
<th><strong>TETRONE</strong>&lt;br&gt;(Lolium multiflorum/westerwolds)</th>
<th>E</th>
<th><strong>IMPACT</strong>&lt;br&gt;(Lolium perenne)</th>
<th>E</th>
<th><strong>REBOUND</strong>&lt;br&gt;(Echinochloa Esculenta)</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SEEDING RATE kg/Ha</strong></td>
<td>25 - 30</td>
<td><strong>SEEDING RATE kg/Ha</strong></td>
<td>20 - 25</td>
<td><strong>SEEDING RATE kg/Ha</strong></td>
<td>30 - 40</td>
</tr>
<tr>
<td><strong>Lifespan (months)</strong></td>
<td>9</td>
<td><strong>Lifespan (years)</strong></td>
<td>5+</td>
<td><strong>Lifespan (months)</strong></td>
<td>9</td>
</tr>
<tr>
<td><strong>Min Rainfall (mm)</strong></td>
<td>700</td>
<td><strong>Min Rainfall (mm)</strong></td>
<td>500</td>
<td><strong>Min Rainfall (mm)</strong></td>
<td>500</td>
</tr>
<tr>
<td><strong>Heading Date (days)</strong></td>
<td>+5</td>
<td><strong>Heading Date (days)</strong></td>
<td>+21</td>
<td><strong>Lifespan (months)</strong></td>
<td>9</td>
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<tr>
<td><strong>Maturity</strong></td>
<td>Late</td>
<td><strong>Maturity</strong></td>
<td>Late</td>
<td><strong>Maturity</strong></td>
<td>Late</td>
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</tbody>
</table>

Tetrone originated from the same source of germplasm as the well known Tetila ryegrass. Tetrone has later maturity than Tetila and consequently higher nutritive value (crude protein and metabolisable energy) for longer into spring. Tetrone may be used for grazing, silage and hay production. Tetrone is also suitable for direct drilling into existing pastures due to its quick to establishment rate. It is extremely frost resistant and has excellent cool season growth making great winter feed. Quick start and fast growing. Annual by nature. Ability to handle tough conditions. Suitable for direct Drilling. Great for over sowing Stallion pastures. Winter feed in Sub Tropical Pastures. Suitable for grazing, silage and or Hay production. Better option than Tetila.

**ON THE REBOUND WITH FORAGE MILLET FOR HORSE HAY**

Rebound forage millet has exceeded the expectations of southern Queensland cattle and hay producer, Michael Ward and has become a versatile replacement for forage sorghum. Mr Ward, who runs Droughtmaster cattle and makes hay for cattle and horses on his Kalbar farm, grew Rebound forage millet for the first time this season. “In previous seasons I have grown forage sorghum, making mainly round bales for cattle. But this year I tried the Rebound double-cropped into a crop of barley that had finished,” he said.

“I sowed it in early-November. I took a chance and direct drilled it. Within 24 hours it had an inch and a half of rain. Sometimes you win and sometimes you lose.” Mr Ward cut about 1000 small square bales from a 4Ha area in mid-January and has found a ready market for the hay, particularly into the horse industry.

“I have been selling it to horse people and have had a lot of good feedback from them. One guy out west who trains cutting horses originally only wanted 90 bales but has ended up buying 350 off me,” he said.

The forage millet crop, which had received an application of CK88 fertiliser at sowing, was given a kick along with an application of Green Urea after the hay cut. “At the start of March I put cows and calves on it to graze it. If the rain had been better through the season I’d say I would have got another cut off it,” Mr Ward said.

Rebound forage millet is a quick performing summer crop, growing rapidly during the first eight to 10 weeks and typically out-yielding other fodder crops in this period. Mr Ward will be including Rebound forage millet in his farming program in coming seasons as he finds it takes less out of the soil than many other crops and its stubble is very easy to handle.

“I have planted forage sorghum in other years and found it takes a lot more out of the ground and makes it harder to work the ground for the next crop. With millet, it is a finer plant which works back into the ground nicely and helps with mulch and organic matter,” he said.

“If you try to plough forage sorghum in it has big stalks in it. That is why I will be planting more millet because you can utilise it better by making hay and also easily plough it back in as mulch.”

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**SOUTHERN QUEENSLAND CATTLE AND HAY PRODUCER, MICHAEL WARD, WITH SOME OF THE HAY MADE FROM REBOUND FORAGE MILLET.**
## WEED CONTROL

### NEW PASTURE HERBICIDE OPTIONS GUIDE

<table>
<thead>
<tr>
<th>REGISTERED CHEMICAL FOR USE IN PASTURE SPECIES</th>
<th>BROADLEAF CONTROL</th>
<th>GRASS CONTROL</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Forage Barley</strong></td>
<td></td>
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<tr>
<td>Agrynite MA, T-Rex®, Bentley®, Ecopar®, Jaguar®</td>
<td>Achieve®, Arcade®, Axial®, Boxer Gold®, Dual Gold®</td>
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<td>Comet® 400, Estericide XTRA 680, Lestron LV</td>
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<td>Agrynite MA (certain varieties), T-Rex®, Ecopar®, Precept®, Amine 625 (2, 4-D amine), Broadstrike®, Canvas 750 (MCPA Amine), LVE 600 (MCPA ester), Comet® 400, Lestron LV, Tordon 242®</td>
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<td>Comet® 400, Jaguar®</td>
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<td><strong>Bladder Clover</strong></td>
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<td>Comet® 250, Raptor® WG, Ecopar®, T-Rex®, Amine 625 (spray graze)</td>
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<td><strong>Medics</strong></td>
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<td><strong>Ryegrasses - Annual, Italian, Perennial</strong></td>
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<td>Agrynite MA, Igran®, Broadside®, Canvas 750 (MCPA Amine), LVE Agritine®, Agritine®, Archer®, LVE 600 (MCPA ester), Lestron LV, Tordon 242®, Lestron LV</td>
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<td><strong>Festulolium</strong></td>
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<tr>
<td>Broadstrike®, Broadside®</td>
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<td><strong>Tall Fescue</strong></td>
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<td><strong>Cocksfoot</strong></td>
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<td><strong>Forage Brassica</strong></td>
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<td>Forage Max®</td>
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<td><strong>Plantain</strong></td>
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<td>Igran®</td>
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<td><strong>Chicory</strong></td>
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<td><strong>Forage Millet</strong></td>
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<td>Amine 625, Comet® 400, Starene Advanced®</td>
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<td><strong>Forage Sorghum</strong></td>
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<td>Attragranz®, Comet® 400, Starene Advanced®</td>
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<tr>
<td>Atrazine, Gesaprim®, Terbyne Xtreme®</td>
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<td><strong>Vetch</strong></td>
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<tr>
<td>Diuron, Metribuzin, Trifluralin, Sencor®480c, Ecopar®</td>
<td>Metribuzin, Trifluralin, Sencor®480c, Elantra Xtreme</td>
<td></td>
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</tbody>
</table>

**This chart is a guide only to which chemical options are registered for specific crops. Always read product label prior to use to confirm tolerance of species, observe withholding periods to grazing or cutting for stockfeed or harvest. Always refer to the label for specific rates, directions for use, crops and adjuvant requirements. Consult with your agronomist or chemical company as listed below.**

### Bayer Products
- Jaguar®, Tigrx®, Precept®, Velocity®, Broadside®, Sencor® 480c
- Please contact Bayer before applying any product to pasture or forage crops to be used for export.

### BASF Products
- Raptor® WG, Spinnaker®, Sharpen®

### CropCare Products
- Agrynite MA, T-Rex®, Bentley®, Igran®, Minder®, Atrazine, Gesaprim®, Terbyne Xtreme®

### Nufarm Products
- Amine 625 (2, 4-D amine), Broadside®, Canvas 750 (MCPA Amine), LVE 600 (MCPA ester), Lestron LV, Tordon 242®, Kerb®, Verdict®, Forage Max®, Paradigm®

### Syngenta Products
- Axial®, Boxer Gold®, Cadence®, Dual Gold®, Arcade®, Spray Seed®, Gramoxone®, Reglone®, Gesaprim®

**Note: Sprayseed, Reglone and Gramoxone are registered in some states only for crop weed control, desiccants and spray applications.**

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**EQUINE PASTURE ADVISOR** | 11
## SOWsmart - Equine Blends -

### SOWsmart Northern Horse HS Blend

**Rainfall 500mm+ / coastal**  
Heavy soil specialist with persistence  
- Katambora Rhodes GX 25%  
- Bambashi Panic 20%  
- Matus Prairie Grass GX 25%  
- GT60 Lucerne GX 20%  
- Cobra Balansa Clover G 10%  
**Sowing Rate** 25-30kg/ha

Focusing on the Northern regions of Australia this blend has specific sub tropical grasses aimed to suit heavier soil types in solid rainfall zones.

### SOWsmart Northern Horse LS Blend

**Rainfall 500mm+ / inland**  
Targeting lighter soil with persistence  
- Premier Dgit Grass GX 35%  
- Galton Panic X 35%  
- L71 Lucerne GX 20%  
- Cobra Balansa Clover G 10%  
**Sowing Rate** 25-30kg/ha

### SOWsmart Southern Horse HR Blend

**Rainfall 500mm+**  
High rainfall, quality and persistence  
- Drylander Diploid Perennial Ryegrass 20%  
- Impact Diploid Long Rotation Ryegrass 20%  
- Tower Tall Fescue 20%  
- Convey Cockfoot 10%  
- Matus Prairie Grass 10%  
- GT60 Lucerne GX 10%  
- Clare 2 Sub Clover G 5%  
- Cobra Balansa Clover G 5%  
**Sowing Rate** 25-30kg/ha

Targeting lighter soil types in the Northern zones of Australia. Long term persistence with tough sub tropical grasses and legumes to match. The Northern Horse LS Blend will give good quality feed with the ability to handle the tougher lighter soil types.

### SOWsmart Southern Horse LR Blend

**Rainfall 350mm+ / dryland**  
Low rainfall permanent pasture  
- Curve Cockfoot 30%  
- Tower Tall Fescue 20%  
- Australs Phalaris 25%  
- L71 Lucerne GX 10%  
- Dalsa Sub Clover G 10%  
- Cobra Balansa Clover G 5%  
**Sowing Rate** 20kg/ha

Designed for the Southern climates / high altitude areas where high performing temperate species will flourish. Targeted to meet equine feed requirements for the entire season.

### SOWsmart PRO Racecourse Blend

**Rainfall 600mm+ / irrigation**  
Designed for even and track areas  
- Valley Diploid Perennial Ryegrass 50%  
- Shootout Diploid Perennial Ryegrass 70%  
**Sowing Rate** 4kg/ha

With specific requirements for heavy traffic areas such as racecourses, this blend has brought together two of the most durable ryegrasses in the industry. Valley and Shootout Perennial Ryegrasses have extremely quick establishment characteristics, this allows for minimal down time for over sow to the next scheduled race meeting. Racecourse blend creates a very even racing surface with excellent cushioning characteristics for optimum racing performance of both track and horses.

---

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**Eyre Peninsula, Mid North SA & WA**  
Rehn Freebairn 0447 711 905

**Depots:** Toowoomba, Tamworth, Dubbo, Wagga Wagga, Canberra, Nowra, Tatura, Warragul, Ballarat, Launceston, Adelaide and Perth.

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