

OVERVIEW

Your fields deserve the best. **GEA** is a Mediterranean-type variety but in the meantime it shows a really good cold tolerance. This is the reason why it is adapted to a very extended cultivation area.

GEA has a very high production potential. It produces high quality forage with a high leaves/ stems ratio.

GEA is recommended for haying and dehydration. **GEA** is specially suited for a frequent cut management.

GEA possesses a particularly well developed root system. This accounts for its good summer drought tolerance. The supplying system of dehydration plants requires a distribution of production along the whole growing season, and this implies good adaptability of the variety to frequent cutting and good regrowth.

Dehydration companies look for high protein content in order to improve their production, while farmers require a high production per hectare in order to get higher income.



- Very fast regrowth after each cutting
- Very early startup after winter
- High content in digestible proteins
- Dormancy 7
- Highly winter hardy
 - Good summer drought tolerance.

| PLANT SIZE | HIGH |
|--------------------------------|----------------------|
| LONGEVITY HIGH | |
| REGROWTH | 25-28 DAYS |
| DROUGHT TOLERNACE | HIGH |
| PROTEIN CONTENT | HIGH |
| TIME OF FLOWERING | MEDIUM |
| FROST TOLERANCE | HIGH |
| DISEASE RESISTANCE | HIGH |
| PRODUCTIVITY | VERY HIGH |
| USAGE | HAY |
| SOWING PERIOD | FEB/MAR/APR/ SEPT |
| SEEDING RATE | 25-40Kg/Ha |
| DEPTH OF SOWING 0.5-1cm | |



Table 3: Yield (tons DM.ha⁻¹) per year to date of dormant lucerne cultivars planted at Cedara.

| Table 6. Tie | | | ear 1 | | | ear 2 | | k . | ar 3 | | Tota | l Yield 1 to 3 | |
|------------------|-----------------|-----------|-------|-----|-----------------------|-------------------|----|-----------|------|---|-----------|-------------------|----|
| Cultivar | Dormancy rating | tons.ha-1 | Rnk | | tons.ha ⁻¹ | Rnk | | tons.ha-1 | Rnk | | tons.ha-1 | Rnk | |
| Aurora A | 6 | 10.94 | 11 | bcd | 16.29 | 12 | ab | 13.80 | 9 | а | 41.02 | 11 | ab |
| Aurora KK | 5 | 9.05 | 18 | d | 16.21 | 13 | ab | 12.94 | 15 | а | 38.20 | 18 | b |
| CAP789 | | | | | | | | | | | | | |
| Sigma | 8 | 11.85 | 9 | abc | 18.40 | 1 | а | 14.70 | 4 | а | 44.95 | 3 | а |
| Gea | 7 | 13.11 | 2 | ab | 17.96 | 4 | ab | 13.82 | 8 | а | 44.89 | 4 | а |
| Genesis II | 7 | 10.17 | 16 | cd | 16.38 | 10 | ab | 12.75 | 16 | а | 39.30 | 15 | ab |
| HL6 | 6 | 13.04 | 3 | ab | 18.22 | 2 | а | 13.85 | 7 | а | 45.12 | 1 | а |
| Magna 601 | 6 | 12.38 | 6 | abc | 16.13 | 14 | ab | 13.34 | 10 | а | 41.85 | 10 | ab |
| Marina | 7 | 12.42 | 5 | abc | 17.43 | 6 | ab | 15.16 | 1 | а | 45.01 | 2 | а |
| PANLUC 26 | 6 | 13.50 | 1 | а | 15.92 | 16 | ab | 13.21 | 12 | а | 42.63 | 9 | ab |
| SA Select AGR | 7 | 10.38 | 15 | cd | 15.40 | 18 | b | 12.62 | 17 | а | 38.40 | 16 | b |
| SA Select KK | 7 | 10.04 | 17 | cd | 15.76 | 17 | ab | 12.51 | 18 | а | 38.31 | 17 | b |
| SA Standard | 5 | 12.11 | 8 | abc | 17.71 | 5 | ab | 14.80 | 2 | а | 44.62 | 5 | а |
| Sardi 7 | 7 | 10.46 | 14 | cd | 18.00 | 3 | ab | 14.78 | 3 | а | 43.24 | 8 | ab |
| Super Aurora | 7 | 11.02 | 10 | bcd | 16.43 | 9 | ab | 13.33 | 11 | а | 40.77 | 12 | ab |
| Venus | 6 | 10.87 | 12 | bcd | 16.03 | 15 | ab | 13.08 | 13 | а | 39.97 | 13 | ab |
| WL357HQ | 5 | 13.04 | 4 | ab | 16.89 | 8 | ab | 13.96 | 6 | а | 43.89 | 6 | ab |
| WL414 | 7 | 12.26 | 7 | abc | 17.11 | 7 | ab | 14.31 | 5 | а | 43.67 | 7 | ab |
| WL525HQ | 8 | 10.60 | 13 | cd | 16.29 | 11 | ab | 13.05 | 14 | а | 39.94 | 14 | ab |
| CV% | | | 10.9 | | | 8.2 | | 9 | 9.9 | | | 7.2 | |
| LSD (0.05) | | 2 | .079 | | 2 | 2.289 2.237 5.036 | | 036 | | | | | |
| Mean | | 1 | 1.51 | | 1 | 16.81 | | 13.67 | | | 41.99 | | |

Lucerne Dormancy Groups

The activity-dormancy of lucerne varieties has little effect on the total production during the life of a stand. It is important though in determining the amount if autumn to early spring production. Lucerne varieties are referred to as being: Winter dormant, semi winter dormant and highly winter active.

More recently a scale of 1 to 10 has been used, 10 being highly winter active, while 3 is winter dormant.

| Scale | Lucerne varieties | Growth habit |
|-------|---|--------------|
| 1–3 | Winter dormant varieties have a dormant period, usually started by shortening daylight hours. Growth during this period virtually stops. They have less winter vigour and so are less suited to sowing in the cooler months of winter. These varieties provide less feed at the critical autumn – early winter period, so are not favoured as dryland varieties. | |
| 4-5 | Semi-dormant varieties have better autumn and spring growth than winter dormant varieties. They have broader crowns which sit lower in the ground compared to more active varieties. These varieties have only a short dormancy period in midwinter. Where strict rotational grazing is not possible, these varieties may persist better than those with more activity. | |
| 6–7 | Winter active varieties slow down in growth during the cold winter months, but they never become dormant. They will recover faster after cutting or grazing than dormant varieties. | |
| 8-9 | Highly winter active varieties also have slower growth in winter but are highly active in late autumn and early spring. Varieties commonly have narrow crowns which sit above ground level, making them more vulnerable to grazing damage. Most Australian bred varieties, however, have retained good grazing tolerance. | |
| 10 | Very highly winter active lucerne varieties are currently very productive but have poor persistence. They are well suited to short rotations (2–4 years) and require careful grazing management to maximise persistence. This catergory has only recently been added to the winter activity scale. | |

