

Ready Reckoner for Pasture Growth Rate Adjustment

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Autumn and winter pasture growth rate adjuster for different fertility conditions

Condition	Decrease daily winter pasture growth
Very low fertility - no survival of improved perennial grasses or clovers. <i>Olsen P < 5, Cowell P < 12</i>	-40%
Low fertility - insufficient to retain sown grasses but some clover might be present, <i>Olsen P 5-7, Cowell P 12-14</i>	-30%
Moderate fertility - perennial grass retained like Phalaris <i>Olsen P 8-9, Cowell P 15-19</i>	-20%
Moderately high fertility , <i>Olsen P 10-14, Cowell P 20-33</i> (Calculated pasture growth rates are set for this)	0%
High fertility , > 30% perennial grass and >30% clover, <i>Olsen P > 14, Cowell P > 33</i>	+ 5-10%

* Moderate category of P Buffering Index (PBI =190)
Reference: Long time trial Hamilton winter growth rates

Winter pasture growth rate adjuster for Gibberellic acid application at the recommended rates

Winter only condition	Expected total additional pasture growth (kg DM / ha)	Increase anticipated daily growth rates for 4 weeks post application (kg DM / day)
June or August Phalaris dominant >30% Moderately higher or High fertility	400	14
June or August Perennial ryegrass dominant >30% Moderately higher or High fertility	300	11
July Phalaris < 30% Moderate fertility	200	7
July Perennial ryegrass < 30% Moderate fertility	150	5

Autumn, winter and spring pasture growth rate adjuster for Nitrogen Application

Condition	Nitrogen Dry Matter response (kg DM / kg N)	Expected total additional pasture growth if 40 kg N / ha applied	Increase anticipated daily pasture growth rates) for 4 weeks in autumn and spring (kg DM / day)
Autumn			
Improved grass < 30% Low fertility <12 Olsen P or <25 Colwell P	8	320	11
Phalaris dominant >30% Good fertility	12	480	17
Perennial ryegrass dominant >30% Good fertility	16	640	23
Winter			
July - Improved grass < 30% Low fertility <12 Olsen P or <25 Colwell P	5	200	5
June or August - Phalaris dominant >30% Good fertility	7.5	300	7
June, August - Perennial ryegrass dominant >30% Good fertility	10	400	10
Spring			
Early spring - Improved grass < 30% Low fertility <12 Olsen P or <25 Colwell P	14	560	20
Improved grass dominant >30% Good fertility	17	680	24
Early / Mid Oct - Perennial ryegrass dominant >30% Good fertility	20	800	29

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