



Perennials

Rules of Thumb

	Species	Minimum rainfall (mm)	Ideal rainfall (mm)	Season length (months)	Clay	Loam	Sand	Soil pH (CaCl ₂)	Nutrient requirements	Soil salinity tolerance	Waterlogging tolerance	Forage value	Grazing tolerance	Groundwater recharge control	Winter growth	Summer state	Drought tolerance	Frost tolerance	Time of sowing
Legumes	Lucerne	250	350+	4+	**	***	***	4.8+	M	M	P	VH	M	VH	G	A	H	H	Autumn Spring
	Tagasaste	300	450+	4+	NS	NS	***	4.0+	L	P	P	G	H	VH	G	A	H	M	Autumn
Herb	Chicory	450	600+	6+	*	***	***	4.0+	H	M	P	VH	M	U	P	A	G	M	Autumn Spring
Temperate grasses	Cocksfoot	425	500+	6+	*	***	***	4.0+	M	P	P	H	M	P	G	D	H	H	Autumn
	Perennial rye ¹	600	650+	8+	**	***	**	4.5+	H	P	P	VH	M	P	G	D	P	VH	Autumn
	Phalaris ¹	400	550+	6+	***	***	*	4.7+	H	P	H	H	M	P	H	D	H	H	Autumn
	Tall fescue	450	600+	7+	*	***	**	4.3+	H	P	H	H	M	U ³	G	A	G	VH	Autumn
	Tall wheatgrass	350	450+	4+	***	***	***	4.5+	M	H	H	H	M	H	G	A	H	H	Autumn
	Veldt grass	300	350+	4+	NS	*	***	4.0+	L	U	P	H	M	M	G	A	H	M	Autumn
Sub-tropical grasses	Digit grass	350	450+	4+	**	***	***	4.1+	L	M	P	G	M	U ³	P	VA	H	L	Spring
	Kikuyu ²	400	500+	5+	*	***	***	3.7+	L	H	H	G	VH	VH	P	VA	H	M	Spring
	Panic	400	500+	5+	*	***	**	4.3+	M	P	P	G	M	U ³	P	VA	H	L	Spring
	Rhodes grass ²	300	400+	4+	*	***	***	4.3+	L	H	M	G	H	VH	P	VA	H	L	Spring
	Setaria	450	500+	6+	*	***	***	4.3+	L	P	M	G	M	U ³	P	VA	G	M	Spring
	Signal grass	450	500+	5+	*	***	***	4.0+	L	U	P	G	H	U ³	P	VA	G	L	Spring

LEGEND

General Scale: VH = Very High; H = High; G = Good; M = Moderate; P = Poor; U = Unknown; NS = Not Suitable

Soil Salinity Tolerance: P = 0-200mS/m(fresh); M = 200-400mS/m(moderate); H = >400(high); U = Unknown (soil salinity units are ECe)

Winter Growth: A = Active; VA = Very Active; D = Dormant

¹ Livestock toxicity problems may arise – seek further advice.

² May be continuously grazed

³ While unknown this species is likely to reduce groundwater recharge



Perennial Species for Out of Season Production

	Species	Wool production	Sheep out of season liveweight gain	Sheep out of season maintenance	Cattle out of season liveweight gain	Cattle out of season maintenance	Conserved feed hay or silage
Legumes	Lucerne	*	****	*	****	*	****
	Tagasaste	*	**	**	**	**	Not applicable
Herb	Chicory	*	****	*	****	*	**** ³
Temperate grasses	Cocksfoot	**	NA ¹	NA ¹	NA ¹	NA ¹	**
	Perennial rye	*	NA ¹	NA ¹	NA ¹	NA ¹	****
	Phalaris	*	NA ¹	NA ¹	NA ¹	NA ¹	**
	Tall fescue	**	**	**	**	**	**
	Tall wheatgrass	**	**	**	**	**	**
	Veldt grass	**	**	**	**	**	*
Sub-tropical grasses	Digit grass	** ²	** ²	** ²	** ²	** ²	**
	Kikuyu	****	**	****	**	**	*
	Panic	** ²	** ²	** ²	** ²	** ²	**
	Rhodes grass	**** ²	** ²	**** ²	** ²	**** ²	*
	Setaria	* ²	** ²	** ²	** ²	** ²	**
	Signal grass	** ²	** ²	** ²	* ²	* ²	*

LEGEND

- * Least appropriate species for the situation → **** Most appropriate species for the situation
- ¹ Not applicable – out of season performance similar to annual pasture unless significant summer rain.
- ² Based entirely on forage analysis.
- ³ Chicory does not make hay but good silage.

For more information contact your local Department of Agriculture Office.



Lucerne



Tagasaste



Kikuyu



Rhodes grass



Tall fescue



Tall wheatgrass



Veldt grass



Cocksfoot



Phalaris



Chicory



Perennial rye



Digit grass



Panic



Setaria



Signal grass



Department of Agriculture



For more information contact your local Office of the Department of Agriculture

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