

balansa clover variety

SARDI



SOUTH AUSTRALIAN
RESEARCH AND
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PASTURES
GROUP

FRONTIER[®]

An early maturing balansa clover for medium-low rainfall areas.

This new annual pasture legume option is a prolific producer of pasture and seed.

Adapted to a broad range of soil types including those that suffer from waterlogging and moderate salinity.



RAINFALL

Adapted to 350-500mm rainfall regions.



SOIL TYPE

Performs well on medium through to heavier soils with pH_(H₂O) between 5.4-9.0. Frontier has excellent waterlogging tolerance and moderate salt tolerance. Deep sandy soils should be avoided.



MATURITY

Frontier is an early flowering variety, flowering two to three weeks earlier than Paradana and four weeks earlier than Bolta.



REGENERATION

An aerial seeding, self-regenerating annual pasture legume, which produces a good seed yield of which about 50% will germinate at the break of the season. Seed will regenerate after a one year crop break. Some hard seeds pass through livestock undigested assisting seed dispersal.



GRAZING

Good persistence under grazing and excellent pasture production with high digestibility; also suitable for hay.

Seasonal herbage and seed yields and regeneration of a range of pastures.

	Variety	Herbage Yield June-October (kg/ha)Year 1	Seed Yield (kg/ha) Year 1	Regeneration (plants/m ²) Year 2
Balansa Clover	Frontier	4567	842	3028
	Paradana	3067	465	730
	Bolta	2834	106	174
Persian Clover	Nitro Plus	1844	21	61
	Kyambro	2129	15	84
Subclover	York	2030	865	460
	Clare	2081	108	88
	Leura	2188	89	126

Keith, SA mean annual rainfall 465mm



PESTS & DISEASE RESISTANCE

Susceptible to redlegged earth mite and lucerne flea, particularly during establishment. Pasture aphids may attack but no significant damage has been seen in South Australia.

Frontier[®] is an early maturing balansa clover for medium-low rainfall areas with excellent waterlogging and moderate salt tolerance.

Pastures for stock, crop & country

Managing Frontier[®] for production and persistence

ESTABLISHMENT

Prepare a fine, clod and weed free seedbed to maximise emergence. Seed may be broadcast and incorporated with light harrows or drilled. Maximum seed placement 1cm deep.

SEEDING RATE & SOWING

Sow soon after the break of the season while soils are warm, providing adequate weed control is achieved. The low seeding rates of 2-5kg/ha generally make Frontier cheaper to establish than medics or subclovers. Frontier can be sown at these rates in mixtures with medics and subclovers. Own saved seed must be scarified before sowing.

INOCULATION

Inoculate with commercial Group C inoculum. About 25kg/ha of nitrogen is produced by every tonne of Frontier pasture.

NUTRITION

Frontier performs best in moderate to high fertility soils. Soil testing is required to determine the correct fertiliser application rates.

WEED CONTROL

Maximise seed set and production by minimising weed competition. Grass selective herbicides provide an effective means of controlling grass weeds. Less selective means of weed control such as hard grazing, spray-grazing, winter-cleaning and spray-topping can be used to control weeds after the initial year. Frontier is more tolerant than medics to broadleaf hormone herbicides but residual broadleaf herbicides can cause poor establishment.

PEST CONTROL

In the year of establishment especially, monitor for redlegged earth mite, lucerne flea and aphid damage, and spray as necessary.

GRAZING

establishment

Graze new Frontier pastures lightly during the establishment year. Remove stock at the start of flowering to increase seed-set. If regeneration is required do not crash graze or cut for hay in the establishment year. Graze pastures hard once seed has matured. Regeneration will be better if most residual dry matter is grazed-off before the season breaks.

regeneration

For good production graze regenerating pastures soon after the autumn break to minimise the competition from weeds. Graze pastures hard from early winter. A moderate stocking rate is tolerated during flowering and seed maturity. Results from WA show that summer grazing weight gains of 6kg/sheep can be achieved on balansa clover compared to 2kg/sheep loss when grazed on unimproved pasture. (WA Farmnote 26/99).

Available from your local farm store. For more information on other varieties and the SARDI Pastures Group visit www.sardi.sa.gov.au/pastures

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BREEDING AND PLANT BREEDERS RIGHTS

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