



CRC Walana[Ⓟ]

field pea

White field pea for human consumption or stock feed, specially selected for northern NSW and Queensland.

CRC Walana[Ⓟ] (tested as PRL131, known as Walana) was bred by Plant Research NZ Ltd and evaluated by the University of Sydney Plant Breeding Institute, Narrabri. This program is supported by the Pork CRC.

Walana has improved yield potential and quicker flowering in the warmer, shorter season environments of northern NSW and southern Qld compared to currently available varieties. It is also resistant to powdery mildew and bean leaf roll virus.

Features

- White flowers; white seeds and yellow cotyledons.
- Semi-leafless with very erect growth habit to medium height.
- Quick or early maturity.
- Resistant to powdery mildew.
- Moderately resistant to bean leaf roll virus (BLRV).
- Resistant to pea seed-borne mosaic virus (PSbMV).

Yield and quality

Walana has been selected for areas in southern Queensland and north of the Macquarie Valley in New South Wales, where powdery mildew often has a significant impact on field pea yield.

In trials across northern New South Wales and

Table 3 Yield in northern NSW Stage 4 trials (12 trials), 2007-2009 as percentage of Maki

Variety	Average	GxE stability* (2008, 2009)
CRC Walana [Ⓟ]	102	0.78
Maki [Ⓟ]	100 (2.08 t/ha)	1.20
Kaspa [Ⓟ]	52	7.20
Parafield	55	5.30
Yarrum [Ⓟ]	99	0.85
SED mean (t/ha)	0.17	

* GxE stability is a measure of line stability across environments—a lower number indicates greater stability.

Yield data supplied by Pork CRC Project 1A-108 *Development of adapted field pea varieties for pork producing regions in northern and southern Australia.*

Table 1 Plant characteristics of Walana and other field pea varieties.

Variety	Seed type	Leaf type	Plant height	Flowering time	Maturity	Standing at maturity	Pod shatter
CRC Walana [Ⓟ]	white	semi-leafless	medium	very early	very early	fair-good	susceptible
Maki [Ⓟ]	blue	semi-leafless	medium	early	early	fair-good	susceptible
Kaspa [Ⓟ]	dun	semi-leafless	medium	late	late	fair	resistant
Parafield	dun	conventional	tall	mid-late	late	poor	susceptible
Yarrum [Ⓟ]	dun	semi-leafless	medium	mid	early-mid	fair	susceptible

Table 2 Disease characteristics of Walana and other field pea varieties.

Variety	Black spot	Downy mildew	Powdery mildew	Bacterial blight*	PSbMV	BLRV
CRC Walana [Ⓟ]	no data	no data	R	no data	R	MR
Maki [Ⓟ]	S	MS-MR	R	S	R	MR
Kaspa [Ⓟ]	MS-MR	MS-MR	S	S	S	S
Parafield	S	S	S	MS-MR	S	S
Yarrum [Ⓟ]	S	S	R	MR_MS	R	MS-MR

Disease resistance: S-susceptible; MS-moderately susceptible; MR-moderately resistant; R-resistant.

*Bacterial blight (*P. syringae* pv. *syringae*)

Queensland, Walana has proven to have a high and stable yield compared to other field pea varieties (Table 3).

Walana gives grain producers in the northern grains region an alternate winter break crop. As a white field pea it can be produced for:

- Stock feed—very low levels of trypsin inhibitor activity, a significant anti-nutritional factor for livestock.
- Human consumption—large grain suitable for splitting.

Sowing time

Planting time should be adjusted to allow flowering to commence from mid to late August to avoid the main frost period. Planting earlier than recommended increases frost risk, planting later than recommended risks yield loss due to heat stress during late flowering and early grain fill.

Table 4 Suggested planting time for Walana

	May			June			
	Week 2	3	4	1	2	3	4
Burnett		■	■	■			
Darling Downs				■	■	■	■
Western Downs/Maranoa		■	■	■			
North west NSW		■	■	■	■		
Liverpool Plains				■	■	■	■

Plant population

Optimal seeding rate is often compromised in large seeded crops like field pea. Always test seed for germination and check seed size. Calculate seeding rate to target 40 plants per m² when sowing at the start of the recommended window, increasing to 50 plants per m² when sowing at the end of the window.

Always treat Walana seed with care, avoiding augering where possible.

Inoculation and nutrition

Always inoculate field peas with Group E Field Pea rhizobium inoculant to ensure effective nodulation

and maximum nitrogen fixation. Apply phosphorus at 10–40 kg per ha, equal to rates used on cereals.

Weed and insect management

Plan the weed management program prior to deciding to grow field peas. Identify likely weeds in the paddock and ensure they can be managed with pre-emergent or in-crop herbicides. If not, choose another paddock. Utilise the relatively late sowing of field peas to employ a double-knock as part of an integrated approach to managing weeds, particularly herbicide resistant annual grasses.

Monitor crops for redlegged earth mite, blue oat mite, lucerne flea and aphids and control as necessary.

Harvest

Harvest of field peas is a crucial part of best practice management. Field peas, especially those destined for human consumption markets, must be harvested as soon as they reach 14% moisture. Desiccation and crop-topping should be considered when growing field peas. Desiccation will:

- Assist with timeliness of harvest—harvest can be advanced by up to 14 days
- Optimise grain quality
- Reduce soil and trash contamination of the sample as the risk of crop lodging is reduced.
- Avoid harvest problems caused by late weed growth or irregular ripening

Crop-topping, if well timed, will stop the seed set of weeds as part of an integrated weed management program.

For further information on growing field peas in northern NSW and southern Qld see "Northern region field pea management guide", Pulse Australia available at www.pulseaus.com.au



website www.waratahseeds.com.au or email info@waratahseeds.com.au

For more information or seed supply contact your local Waratah Seed Co. Ltd. member:

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