

KEY FEATURES

- Ascochyta blight resistance far superior to Howzat and Jimbour and MOST crops should NOT require fungicide sprays for ascochyta blight control.
- Moderate susceptibility to Phytophthora root rot, equivalent to Howzat.
- Tall plant type, similar to Jimbour but improved harvestability due to increased height of lowest pod and superior lodging resistance.
- Medium size light coloured seed well suited to the whole seed and/or splitting markets.

Varietal Description

Breeding and Development

Flipper (Formerly 93011-1021) was bred by NSW DPI plant breeder Ted Knights, supported by funding from GRDC

Disease Reaction (Common Desi varieties)

Description	Ascochyta	Phytophthora Root Rot	Botrytis Grey Mould	Virus
Resistant	Genesis 509			
Moderately Resistant	Flipper	Yorker		Gully
Moderately Resistant to Moderately Susceptible	Yorker	Flipper , Jimbour, Kyabra, Moti#		Flipper
Moderately Susceptible		Howzat	Genesis 509, Howzat, Moti#	
Susceptible	Amethyst, Howzat, Jimbour, Kyabra	Amethyst, Genesis 509, Gully	Amethyst, Flipper , Jimbour, Kyabra, Yorker	Amethyst, Genesis 509, Howzat, Jimbour, Kyabra, Yorker
Very Susceptible	Gully, Moti#		Gully	

Note: These are provisional Pulse Breeding Australia national ratings. They are for average disease pressure at the start of the season and average conditions for the disease during the season. Ratings will vary with inoculum load and seasonal conditions.
Moti is not to be grown south of Theodore, Central Queensland.

Agronomic Features

Variety	Maturity score ¹	Plant height (cm)	Low pod height (cm)	Lodging ²	Seed Weight (g/100)
Yorker	5.7	59.0	31.4	1.6	21.3
Flipper	6.0	63.0	37.0	1.6	18.1
Jimbour	4.9	63.2	35.1	1.7	19.7
Howzat	5.4	61.1	28.0	2.3	21.2
Amethyst	4.8	60.2	31.4	1.4	15.1

¹ 1 = very early harvest maturity, 9 = very late harvest maturity

² 1 = fully erect, 9 = flat

Yield and adaptation

Grow Flipper in the higher rainfall areas of NSW and adjacent Queensland border districts. If grown in southern Queensland its good level of Ascochyta resistance needs to be balanced against its later maturity and reduced yield potential. NOT recommended for Central Queensland.

Grain yield (t/ha) in Northern NSW field trials 2003-2007 (number of trials in parentheses).

Variety	NSW ¹		NSW ²				
	Very low ascochyta pressure	Very high ascochyta pressure	2007	2006	2005	2004	2003
Yorker	3.38	2.11	0.90 (11)	1.51 (11)	1.58 (12)	1.82 (14)	1.42 (12)
Flipper	2.90	2.54	0.90 (11)	1.52 (11)	1.62 (12)	1.72 (14)	1.38 (12)
Jimbour	3.12	0.43	0.97 (11)	1.65 (11)	1.67 (12)	1.90 (12)	1.50 (11)
Kyabra	-	-	1.01 (11)	1.76 (6)	-	-	-
Howzat	3.15	0.62	-	1.65 (11)	1.69 (12)	1.83 (15)	1.62 (13)

¹ Yield data is from NSW DPI TAC04 trial 2004 inoculated with diseased chickpea residue.

² Yield data is from NSW DPI stage 3 trials and Pulse Breeding Australia Nation Variety Trials, under low ascochyta pressure (No. of trials).

Disclaimer:

Recommendations have been made from information available to date and considered reliable, and will be updated as further information comes to hand. Readers who act on this information do so at their own risk. No liability or responsibility is accepted for any actions or outcomes arising from use of the material contained in this publication.

Agronomic Management

Follow the chickpea planting and management recommendations for your area with the following modifications:

Sowing Date and Seeding Rate

Flipper can be planted earlier (up to 10 days) in the planting window due to the combination of Improved Ascochyta resistance, better standability and slightly later maturity. Earlier sowing will maximize yield potential. Seeding rate can be reduced by 5 – 10% less than Jimbour because of smaller grain size.

Weed control

Follow strategies used for Jimbour, Howzat and Amethyst.
Residual Herbicide use - **Do not apply if rain is imminent**. Maintain at least 7.5 – 10 cm soil coverage. Avoid leaving a furrow or depression above the seed that could allow water (and chemical) to concentrate around the seed/seedling. Avoid leaving an exposed, open slot over the seed with disc-openers and avoid a cloddy, rough tilth with tined-openers

Disease management

Follow the seed, paddock selection and hygiene recommendations in the most current publication “Chickpea Disease Management Strategy – Northern Region”. Check the registration/permit status of any pesticide prior to use.

Ascochyta Blight

For all situations, there is no cost benefit in applying a fungicide until after Ascochyta is detected. Monitor the crop 10-14 days after rain events and if Ascochyta appears to be spreading, apply 1 kg/ha of dry formulation product containing 750 g/kg mancozeb (or equivalent liquid). Or 1.0L/ha of one of the 4 products currently listed on the APVMA permit 9814 containing 720g/L chlorothalonil prior to the next rain event. Continue monitoring and spray again if weather and disease levels indicate Ascochyta is spreading.

Botrytis Grey Mould (BGM)

As fungicide usage for Ascochyta is expected to be less with Flipper than Jimbour or Howzat, monitor for BGM in spring as temperatures and humidity rise. Apply a suitable fungicide as required containing either carbendazim or mancozeb. Fungicides used for ascochyta control may not necessarily be as effective as those that specifically target BGM.

Seed Commercialisation

Flipper^ϕ is protected by PBR. Growers can retain seed from production of Flipper for their own seed use. Seed is commercialised through AWB Seeds and is available through local seed suppliers.

Flipper^ϕ Seed Supply enquiries:		Phone 1800 054 433
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This Flipper^ϕ VMP was jointly prepared by Ted Knights and Kevin Moore (NSW DPI) and Gordon Cumming (Pulse Australia).
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