



# AGPRO DIRECT

## TECH SHEET: *Potatoes*

Potatoes are generally grown from seed potatoes sourced from South Island growers – these are tubers specifically grown to be disease-free and provide consistent and healthy plants. To be disease free, the areas where seed potatoes are grown are selected with care. These locations are selected for their cold hard winters that kill pests and long sunshine hours in the summer for optimum growth.

Potato growth has been divided into five phases. During the first phase, sprouts emerge from the seed potatoes and root growth begins. During the second, photosynthesis begins as the plant develops leaves and branches. In the third phase stolons develop from lower leaf axils on the stem and grow downwards into the ground and on these new tubers develop as swellings of the stolon. This phase is often (but not always) associated with flowering.

Tuber formation halts when soil temperatures reach 27 °C hence potatoes are considered a cool-season crop. Tuber bulking occurs during the fourth phase, when the plant begins investing the majority of its resources in its newly formed tubers. At this stage, several factors are critical to yield: optimal soil moisture and temperature, soil nutrient availability and balance, and resistance to pest attacks.

The final phase is maturation: The plant canopy dies back, or sprayed off using a desiccant herbicide, to allow the tuber skins to harden, and their sugars convert to starches.

Correct potato husbandry can be an arduous task in some circumstances. Good ground preparation, soil tests are always needed, along with a little grace from the weather



and a reliable source of rain or irrigation. Commercial growers plant potatoes as a row crop using seed tubers, with specific insecticide and fungicide treatments “in furrow” applied to prevent diseases and pest damage.

Potatoes are sensitive to heavy frosts, which damage them in the ground. Even cold weather makes potatoes more susceptible to bruising and possibly later rotting, which can quickly ruin a large stored crop.

We at AGPRO have put together a comprehensive suggested crop management programme for protecting your potato crop from planting until harvest. For fertilizer requirements contact one of the many NZ based fertilizer companies for specific recommendations for your soil type and planting times.

**AGPRO HORTICULTURE**  
**Freephone 0508 536 536**  
*for technical assistance*



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### SUGGESTED AGPRO SPRAY PROGRAMME

Make your paddock selection as early as possible, noting the weeds that are present. We are happy to discuss the correct sprayout option, and to receive pictures from your smartphone should you have problems identifying these. General rule of thumb is sprayout 8-10 weeks prior to planting.

#### AT PLANTING:

Product	Application timing	Purpose	Rate/ha	Comments
AGPRO Azoxystrobin	At planting in furrow	Black scurf/silver scurf	10ml per 100m row	15-30cm band over seed

#### STRAIGHT AFTER PLANTING PRIOR TO CROP EMERGENCE:

Product	Application timing	Purpose	Rate/ha	Comments
AGPRO Glyphosate or AGPRO Paraquat	Pre crop emergence	Remove any weed present	1-1.5L/ha	Add AGPRO Wilt 700
AGPRO Metribuzin	Pre crop emergence	Desiccation of small weeds	1.5-3L/ha	For early crops April-Aug
AGPRO Metribuzin + Cyanazine and/or AGPRO Liron	Pre crop emergence	Residual broadleaf weed	720ml/ha	Main crop mix Aug-Nov
		Residual broadleaf weed	1.1L + 2-3L	

#### SUGGESTED GENERAL PROGRAMME POST EMERGENCE (for early and late planted potatoes):

Product	Application timing	Purpose	Rate/ha	Comments
AGPRO Chlorothalanil	Immediately after emergence	Early and late blight protection	1.1L/ha	Add AGPRO Sonic or Latex 520
AGPRO Lambda	7-10 days after emerg	Control of aphids	40-60ml/ha	Good coverage with AGPRO Sonic
AGPRO Azoxystrobin + AGPRO Mancowall	14-21 days after emergence	Early and late blight protection	500ml + 2kg	Add AGPRO Sonic or Latex 520
AGPRO Helios + Chlorothalanil	Based on disease pressure	Late blight (winter)	800ml + 1.1L	Tank mix + Latex 520
AGPRO Glacier	Within 4 weeks of emergence	Early blight (Jan-May)	500ml + Mancowall	Add AGPRO Sonic or Latex 520
AGPRO Procymidone + AGPRO Copperstar	After crop damage, hail or frost	Prevent botrytis/sclerotinia	500ml	Add AGPRO Sonic or Latex 520
AGPRO Lambda + fungicide	After signs of psyllids	Prevent establishment (monitor)	100ml	7-14 day intervals
AGPRO Dimethomorph + AGPRO Mancowall	Alternating systemic	Early or late blight	360ml + 2kg	Add AGPRO Sonic or Latex 520
AGPRO Mancowall	Every 7-10 days as required		2-2.5kg	Mix with suitable fungicide
AGPRO Fluazinam + AGPRO Chlorothalanil	At signs of damage	Early/late blight, sclerotinia	250ml	Highly effective mix

The Products listed above fit into a general Potato management spray programme which will vary on planting times, NZ region, and assessment by a qualified technical field officer or crop advisor after viewing the crop.

AGPRO NZ can help with these specific options after discussion with the client. Please refer to all product labels, your crop advisor or contact AGPRO 0508 536536

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