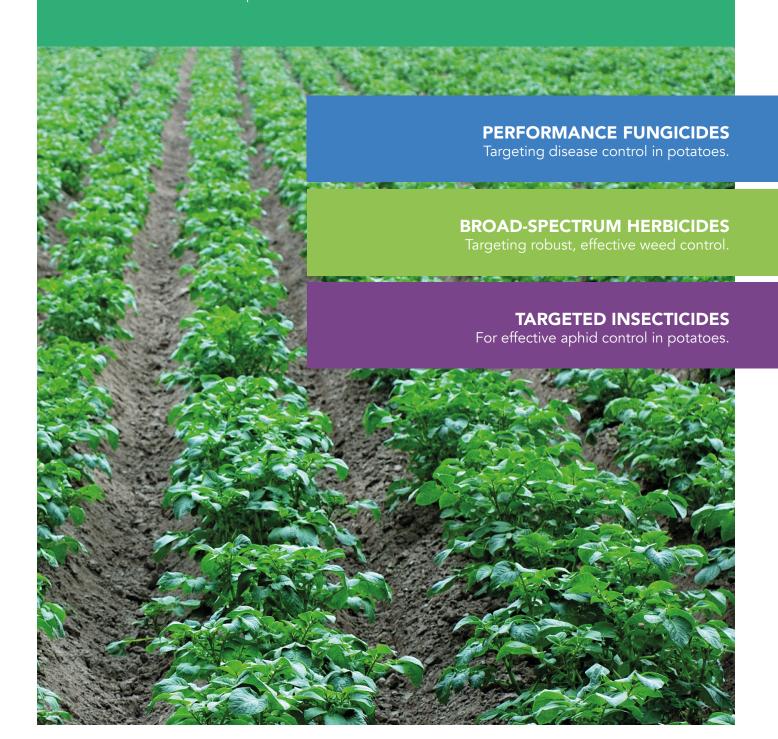
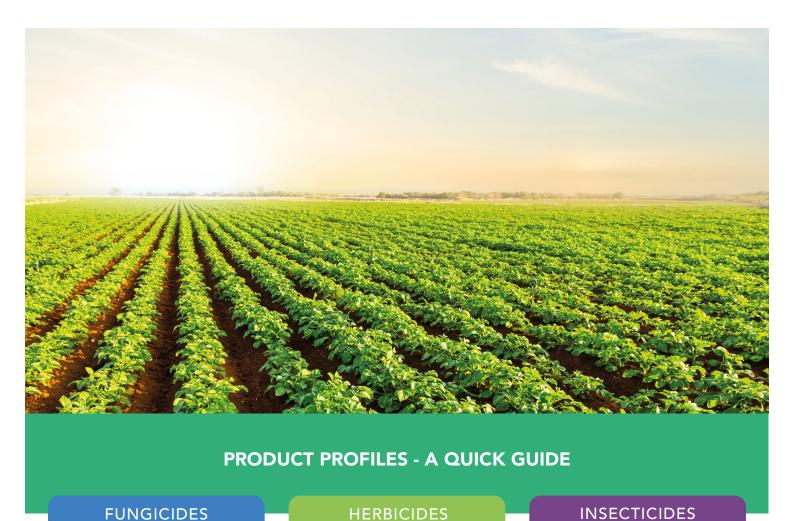


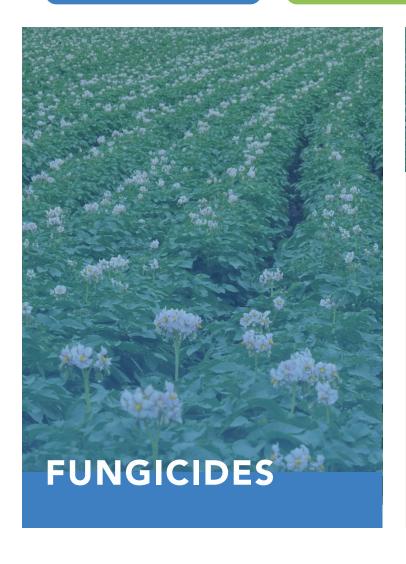
PRODUCT INFORMATION GUIDE

POTATO RANGE - SPRING 2021

Clayton Plant Protection offer a wide range of leading products for Potato crops this Spring. Achieving good crop growth to maximise yields relies on effective, early control of damaging disease, pests and weeds. Careful planning in terms of product choice will help growers achieve the best results for their crops this season.







AZOFIN® PLUS FUNGICIDE

Flexible, systemic and protectant strobilurin fungicide for potato in-furrow treatment and foliar spray.

Contains 250g/l azoxystrobin

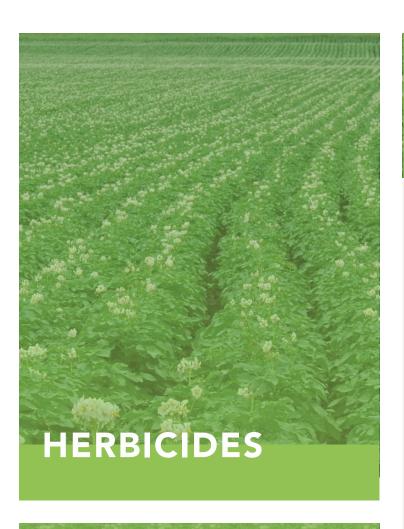
Use rate and timing

(In-furrow application at planting) - apply at 3.0 l/ha for a maximum of 1 treatment per crop at planting.

(Foliar spray) - apply at 0.5 l/ha for a maximum of 3 treatments per crop at minimum 7 day spray intervals, up to latest application 7 days before harvest. Target use between GS51-85.

Target diseases

Stem canker and Black scurf (*Rhizoctonia solani*), Black dot (*Colletotrichum coccodes*) – Reduction (in-furrow use only). Early blight (*Alternaria solani*) - Moderate control (foliar use only).





Effective herbicide for control of certain annual grass and a range of broad-leaved weeds in both early and maincrop potatoes.

Contains 800 g/l prosulfocarb

Use rate and timing

Apply at 5.0 l/ha for a maximum of 1 treatment per crop at emergence (soil rising over emerging potato shoots). May also be applied pre-emergence. Complete ridge formation before application and do not disturb treated soil after application.

Target weeds

Rough stalked meadow grass, Speedwell species (various), Black Nightshade, Chickweed, Forget me not, Cranesbill, Red dead-nettle (all susceptible – see label for timings).

Annual meadow grass, Loose silky bent, Cleavers (all moderately susceptible – see label for timings).

CLAYTON BRAMBLE® CLAYTON NERO® HERBICIDES

Sulphonylurea herbicide for the control of certain broad-leaved weeds in potatoes.

Contains 250 g/kg rimsulfuron

Use rate and timing

Apply at 50 g/ha for a maximum of 1 treatment per crop (not before the 1st February) and before the most advanced shoots are 25cm high. Apply both products with an authorised non-ionic wetting agent at 0.1 % v/v.

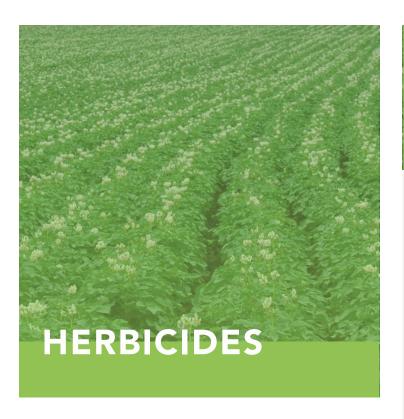
Target weeds

Charlock, Common Chickweed, Cleavers, Red deadnettle, Hemp-nettle, Scentless Mayweed, Small Nettle, Redshank, Volunteer OSR (all susceptible, at cotyledon to 2 leaves).

Black-bindweed, Knotgrass, Black Nightshade, Pale Persicaria (all moderately susceptible). Fat-hen (moderately resistant).

Useful suppression of common couch in the year of application may result when application coincides with the weed being at its 4-6 leaves stage.





PENDIFIN® 400SC HERBICIDE

Broad-spectrum herbicide for control of a wide range of weeds in both early and maincrop potatoes.

Contains 400g/l pendimethalin

Use rate and timing

Apply at 3.3 l/ha for a maximum of 1 treatment per crop, pre-crop emergence.

Target weeds

Annual meadow grass, Charlock, Common Chickweed, Common Orache, Common Poppy, Corn Marigold, Fat hen, Forget me not, Field Pansy, Groundsel, Hemp nettle, Henbit dead-nettle, Knotgrass, Mayweeds, Parsley piert, Red dead-nettle, Redshank, Scarlet pimpernel, Small nettle, Speedwells, Volunteer OSR (all susceptible). Rough meadow grass, Black bindweed, Cleavers, Common Fumitory, Shepherd's-purse, Smooth sowthistle (all moderately susceptible).

Potatoes (First earlies, second earlies and maincrop).

Pendifin 400 SC can be applied at 3.3L/ha with the addition of 0.35kg/ha metribuzin in a water volume of 200L/ha, pre-emergence of the crop as soon after planting and ridging up as possible.

For optimum weed control the ridges should be settled and well-rounded with few clods.

NEW FOR 2021 CLAYTON MIZEN® CLAYTON MIZUNA® HERBICIDES

Powerful residual herbicide for weed control in early and maincrop potatoes.

Contains 70% w/w metribuzin

Use rate and timing

(Potato – earlies) apply at 0.75 kg/ha for a maximum of 1 treatment per crop, pre-emergence.

(Potato – maincrop) apply at 0.75 kg/ha pre-emergence and/or 0.5 kg/ha post- emergence, before the shoots reach 15cm in length. A minimum of 21 days must be observed between applications. A maximum total dose of 0.5 kg product/ha/season may be applied post-emergence of the crop.

Early germinating weeds - for best control, apply between the cotyledon to one true leaf stage.

Target weeds

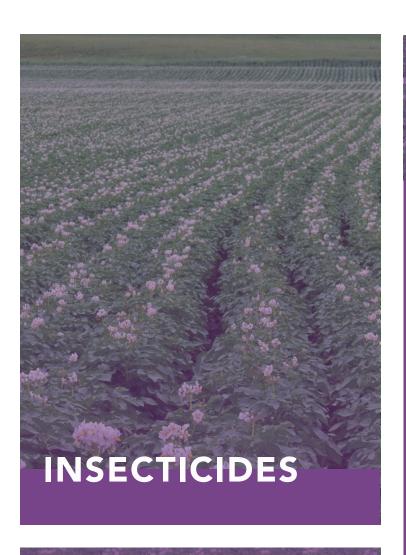
Annual meadow grass, Blackgrass, Bugloss, Charlock, Common Chickweed, Common Fumitory, Common Orache, Common Poppy, Corn spurrey, Fat hen, Forget me not, Field Pansy, Field Penny-cress, Groundsel, Hemp-nettle, Henbit dead-nettle, Knotgrass, Mayweed spp., Pale persicaria, Red dead-nettle, Redshank, Scarlet pimpernel, Shepherd's-purse, Small nettle, Speedwell spp., Sun spurge, Volunteer OSR, Wild radish (all susceptible, pre-emergence). Black bindweed (moderately susceptible, pre-emergence). Black nightshade, Cleavers (both resistant, pre-emergence).

See label for post-emergence weed susceptibility details.

Please note:

Not all varieties of potato may be safely treated with CLAYTON MIZEN / MIZUNA. Please refer to the product label or contact Clayton Plant Protection Ltd for more information.







Tetronic insecticide for the control of a range of aphids in potatoes.

150 g/l spirotetramat

Use rate and timing

Apply at 0.48 l/ha for a maximum of 4 treatments per crop, latest time of application 14 days before harvest.

Apply as aphids start to build up in the crop.

The product works relatively slowly and works best when the plant vascular system is actively transporting product and the pest species are actively feeding. All potato varieties may be treated.

Target pests

Peach-potato aphid (*Myzus persicae*), Glasshouse-potato aphid (*Aulacorthum solani*), Buckthorn-potato aphid (*Aphis nasturtii*).

CLAYTON SPARTA® INSECTICIDE

Pyrethroid insecticide for the control of aphids in potatoes.

50 g/l lambda-cyhalothrin

Use rate and timing

Apply at 0.15 l/ha for a maximum of 4 treatments per crop (maximum total dose 0.6 l/ha) with a minimum interval of 7 days between applications.

Seed / Ware crops - Spray upon professional advice or immediately threshold levels are reached. Repeat at 7-14 days as necessary whilst aphids present a risk.

To discourage aphid feeding (so as to minimise virus transmission) and to control aphids already in the crop use Clayton Sparta in mixture with another insecticide with an alternative mode of action. This also ensures good resistance management practice. Observe any label restrictions on the partner product.

Target pests

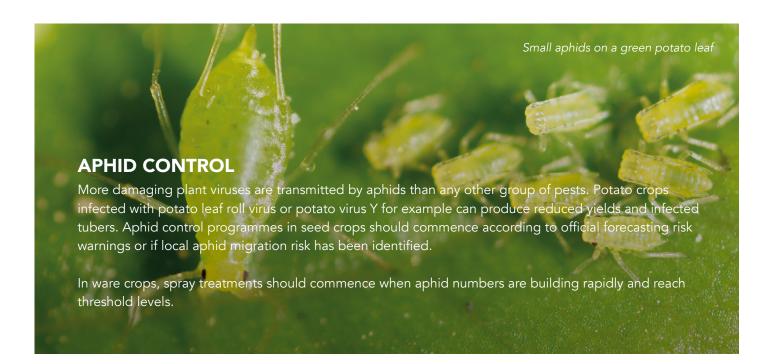
Aphids, including Peach-potato aphid (*Myzus persicae*), Potato aphid (*Macrosiphum euphorbiae*) and others.



DISEASE CONTROL

Avoiding crop stress also reduces disease impact, so good crop management, appropriate fertiliser applications and irrigation best practice all help. Early blight (Alternaria solani) is a mainly soil-borne fungal pathogen that affects potato crops. Warm and wet periods favour the disease, and if not controlled, it can cause dramatic leaf loss, leading to yield reductions of up to 30%.

The disease is distinct from late blight (*Phytophthora infestans*). Other fungal diseases such as Black Dot, Black Scurf and Stem Canker are also important to treat by an in-furrow application at planting to reduce damage to both yield and quality. See Azofin® Plus product profile above for details on use rates and timings.



WEED CONTROL Good pre-emergence and post-emergence in-crop weed control will help to reduce competition for light, water and nutrients by weeds leading to better crop establishment and improved yields for potato crops. Additionally, good weed control is also an important component of the overall pest & disease control strategy in potato crops as many aphid species use weeds for overwintering and weeds such as Common Chickweed, Fat-hen and Black Nightshade can act as a reservoir for virus diseases such as potato virus Y. Good weed management, removing volunteers and alternative hosts such as Nightshade, will also reduce levels of fungal disease such as Alternaria.

