Tramino®

Selective herbicide for controlling annual and perennial broadleaf weeds in pasture, forage brassicas and forage plantain.

Active Ingredient: 30g/litre aminopyralid
Chemical Group: Pyridine carboxylic-acid
Formulation: Soluble concentrate
Pack Size: 10 Litre

Tramino® Weed control you can depend on:

- ✓ Good selectivity in pasture, forage brassicas and forage plantain.
- ✓ Controls a wide range of problem broadleaf weeds.
- ✓ Systemic activity.
- ✓ Absorbed by foliage and roots.
- ✓ Weed growth ceases within 48 hours.

About Tramino®

Tramino® is a selective herbicide which effectively controls many problematic weeds in pasture, forage brassicas and forage plantain. These weeds include thistles, Ragwort, Giant buttercup, Docks and Hemlock. Tramino® is a pyridine carboxylic acid herbicide that provides systemic control of target species with good tolerance of cool and warm-season grasses. Tramino® is a post-emergence herbicide that controls the entire plant, including the roots, and offers soil residual activity to extend control. Tramino® also provides pre-emergence weed control on many susceptible weeds, including some that are not susceptible to foliar applications.

Withholding periods:

Pasture - Animal safety/precaution: Grazing pasture immediately after application is safe for animals. However, poisonous plants (e.g. ragwort and capeweed) may become more palatable after spraying. If there is concern that stock health may be impacted then stock should be kept out of treated area until the plants have died down.

Residues – Meat: Animals grazing pasture more than 7 days after treatment may be sent for slaughter. Animals grazing treated pasture within 7 days of treatment must be grazed for at least 4 days on clean feed. Clean feed is a paddock where there is no grazing restriction in force at the time of grazing.

Cutting for animal feed – e.g. hay or silage: Do not cut treated paddocks for animal feed for 12 weeks after application.

Milk: Do not graze animals currently being milked on areas treated with Tramino within 3 days of application.

Forage brassicas and forage plantain: Do not graze or cut for animal feed for 7 days after application. After this period, animals may graze forage brassicas or forage plantain and be sent for slaughter or used for milk production.

Environmental Protection: DO NOT use on turf. DO NOT allow spray drift onto susceptible crops. Refer to re-establishment of pastures and planting of crops section. DO NOT apply close to, or onto, areas where sprayed soil or surface water may run off to areas containing, or are to be planted with, susceptible plants. Tramino must not be used for the treatment of crops or plants where these will be used for making compost; or where the crops will be made available for collection for, or deposited at, a municipal green waste recycling depot.

Animal Waste – Pasture:

Animals will become free of residue after grazing for 4 consecutive days on clean feed. **Clean feed is a paddock where there is no withholding period or grazing restriction for Tramino or any other product in force at the time of grazing.**

DO NOT apply animal waste such as manure or slurry from animals which have grazed pastures treated with Tramino within the previous 12 weeks to susceptible crops, or to land which is used for growing susceptible crops (see the Crop Rotation section).

Unless fed on clean feed for 4 days, the purchaser of animals grazing on pasture treated with Tramino in the last 12 weeks must be advised that manure, slurry and paunch grass from these animals may contain residues and therefore the purchaser must follow the relevant Protection for the Environment restrictions on this label. This restriction is no longer required once 12 weeks has elapsed from treatment to grazing.

DO NOT plant any susceptible crop in paddocks treated in the previous year with manure from animals that have grazed treated pasture within 12 weeks of application until a field bioassay indicates that the residue concentration in the soil is at a level that is not injurious to the crop that is to be planted – see the Crop Rotation section. To promote herbicide decomposition, manure should be evenly incorporated in the surface soil. Breakdown of residues in plants or manure is more rapid under warm, moist soil conditions and may be enhanced by supplemental irrigation.

Dairy and feed pad effluent. Effluent from animals grazing treated pasture within 12 weeks of spraying may contain residues. Effluent from these animals may contain residues for 4 days after removal of the animals from the Tramino sprayed pasture. Disposal of the effluent by irrigation may cause damage to clover and other sensitive crops during this 4 day period.

Animal waste – forage brassicas and forage plantain:

Unless fed on clean feed (see above for clean feed explanation) for 4 days, the purchaser of animals grazing on forage brassicas or forage plantain sprayed with Tramino within the last 10 weeks must be advised that manure, slurry and paunch grass from these animals may contain residues and therefore the purchaser must follow the relevant Protection for the Environment restrictions on this label. This restriction is no longer required once 10 weeks has elapsed from treatment to grazing.

Dairy and feed pad effluent:

Effluent from animals grazing forage brassicas or forage plantain sprayed with Tramino within the last 10 weeks may contain residues. Effluent from these animals may contain residues for 4 days after removal of the animals from the Tramino sprayed crops. Disposal of this effluent by irrigation may cause damage to clover and other sensitive crops during this 4 day period.

DO NOT plant a susceptible crop in fields treated in the previous year with animal waste that may contain Tramino residues until a field bioassay shows soil residues are not harmful (see Crop Rotation section).

Crop rotation:

RE-ESTABLISHMENT OF PASTURES AND PLANTING OF FOLLOWING CROPS.

Tramino is injurious to legumes and other broadleaf plants. Soil residues may prevent their early re-establishment after spraying. Susceptible crops and plants include but are not limited to, flowers, fruit trees, legumes, ornamentals, potatoes, shade trees, squash, tomatoes, vegetables, or vine crops.

Susceptible crops and plants may be damaged by this herbicide during both growing and dormant periods. If in doubt regarding other crops, or for further information, please consult an Adria Crop Protection representative.

The rate of soil residue decline is dependent on several factors (including soil type and rainfall) and will vary depending on geographic area. Under low rainfall conditions (<800mm per year) or in heavy, poor draining soils, delay planting of susceptible crops for at least 2 years. To promote herbicide decomposition, plant residues from the treated crop should be evenly incorporated in the surface soil. Breakdown of residues in plants or manure is more rapid under warm, moist soil conditions and may be aided by supplemental irrigation.

Following Crop	Comments
Clovers	To mitigate potential clover damage from soil residues, allow a minimum of 6 months after an application of 1L/ha, 8 months after an application of 1.5L/ha, and 12 months after an application of 2L/ha. Deep ploughing to completely invert the soils, followed by soil cultivation is recommended before sowing clover. If over-sowing, allow a minimum of 6 months and then conduct a bioassay as described below.
Cereals, maize, annual ryegrass, perennial ryegrass and forage brassicas	Can be sown at any time following pasture, forage plantain or forage brassica crops sprayed with Tramino.
Potatoes, peas, Lucerne, beans, cucurbits, tomatoes, vegetable crops (other than brassicas and sweetcorn), vine and tree crops and other crops which are very susceptible to Tramino.	Do not sow for at least 18 months after spraying Tramino and not until after the bioassay described below has indicated that it is safe to do so. Do not use Tramino if it is necessary to sow these susceptible crops within the above-suggested periods. Avoid repeat treatments within the same year of Tramino to pasture and repeat treatments to successive forage brassica crops as this can increase the potential for soil residues.

Soil Bioassay:

A simple bioassay can be conducted by collecting at least 10 spade spits of soil to a depth of 20cm from around the paddock and thoroughly mixing the soil together. Place some of this soil in a shallow container to a depth of 3-5cm and sow 100 seeds of the susceptible crop to be grown (subterranean or white clover is a good indicator plant where it is not practical to use the susceptible crop) into the soil. Keep in a warm situation with good light and ensure adequate soil moisture. After crop emergence, check the number of plants that have germinated and seedling vigour. Symptoms of Tramino residues include low or non-germination and emergence, leaf cupping, leaf whitening, stem elongation and twisting. If these symptoms occur, do not plant the susceptible crop. Repeat the bioassay again after a further time interval.

Decontamination:

Cleaning Spray Equipment – **Rinse water should be discharged into a designated disposal area or, if this is unavailable, onto wasteland away from susceptible plants and drains sewers and water courses.**

Rinsing: Empty the tank completely and drain the whole system. Thoroughly wash inside the spray unit using a pressure hose. Drain and clean any filters in the tank, pump, lines, hoses and nozzles.

After cleaning the tank as above, quarter fill with clean water and circulate through the pump, lines, hoses and nozzles. Drain and repeat the rinsing procedure twice.

Equipment MUST be decontaminated BEFORE and AFTER the application of Tramino.

Decontamination BEFORE using Tramino:

When spraying forage brassicas or forage plantain, spray equipment **MUST** be decontaminated BEFORE using Tramino, particularly if herbicides such as MCPA, MCPB, 2,4-D and sulphonylurea compounds have been used prior to Tramino. Small amounts of the above herbicides can severely affect forage brassica and forage plantain crops.

WARNING: If adding a spraying oil to Tramino AND a sulphonylurea has been used ANY time previously through the same equipment, decontamination using the method provided on the sulphonylurea product label MUST be undertaken before adding Tramino and spraying oil to the spray tank.

Decontamination AFTER using Tramino:

Small amounts of Tramino will damage susceptible crops (see Crop Rotations section).

Decontamination: Quarter fill the tank and add a standard alkali based laundry detergent at 500g/mls per 100L water and circulate throughout the system for at least 15 minutes. If using a concentrated laundry detergent use 250g/mls per 100L water. Do not use chlorine based cleaners.

Drain the whole system. Remove filters and nozzles and clean them separately. Finally, flush the system with clean water and allow draining.

The effectiveness of decontamination should be checked by applying water from the decontaminated sprayer to sensitive plants such as beans or peas, and observing after 10 days for symptoms.

Application Methods – Pasture:

Knapsack: Apply as a light wetting spray to full coverage.

High volume: Apply as a light wetting spray to full coverage using either a hand lance fitted with a solid cone nozzle or a handgun fitted with a 4 tip at 500kPa.

Boom spraying: Use a minimum of 200 litres of water per hectare applied as a medium quality spray as defined by the British Crop Protection Council (BCPC) system or the American Society of Agricultural and Biological Engineers (ASABE-S572).

Aerial spraying: Use a minimum of 60 litres of water per hectare applied as a coarse quality spray as defined by BCPC and ASABE.

Carpet type weedwiper: Ensure the wiper remains saturated while in use. Two passes in opposite directions are recommended. Drain and wash the wiper with water immediately after use.

IMPORTANT: In order to select the appropriate nozzles for the required spray quality and operate the equipment to minimise spray drift, this product must be applied in accordance with the New Zealand Standard for the Management of Agrichemicals (NZS8409).

Mixing:

Pour the measured quantity of Tramino into a partially filled spray tank and add the remainder of the water. Agitate thoroughly during filling. **When using marker dyes follow the mixing instructions recommended on the marker dye label.**

Directions For Use:

Tramino controls many herbaceous broadleaf weeds. Best results will be achieved by spraying weeds during the active vegetative growth stage. All spray applications should ensure complete coverage of the target weed.

Rainfastness:

Do not apply if rain is likely within one hour.

PASTURE – SPOT SPRAYING (Table 1):

Weeds	Knapsack or battery powered motorbike sprayers ml/10 litres	High volume gun and hose ml/100 litres	Comments
Ragwort and thistles (except Californian thistles)	60	200 250	Rosette and multicrowned plants. Early flowering plants.
Californian thistle Cape weed Docks	60	300	Apply during active growth stage between full leaf and early flowering. Do not apply if frosts are imminent. For Californian thistle, follow-up treatment may be required in the following season.
Giant buttercup Hemlock Horehound Inkweed Woolly mullein	60	300	Apply during active growth and when there is no risk of frost occurring. Add a penetrant to improve efficacy.
Goats rue	60	300	Apply during active growth and when there is no risk of frost occurring.

Pasture – Broadcast Application (Table 2): Apply to heavy infestations only.

Weeds	L/Ha	Comments
Broadleaf dock **Giant buttercup** **Goats rue**	2	Apply during active growth and when there is no risk of frost occurring.
Ragwort, thistles **Californian thistle** **Cape weed**	2	Apply only to heavy infestations. Optimal results will be achieved from applications to weeds in active growth, before flowering, and when there is no risk of frost occurring. Respraying of Californian thistle may be necessary in the following season.

NOTE: IN THESE AREAS, LEGUMES SUCH AS CLOVERS AND LUCERNE WILL BE REMOVED.

Carpet Type Weedwiper: For control of ragwort and Californian thistle, dilute 1 part Tramino with 40 parts water (1:40). Ensure the wiper remains saturated while in use. Two passes in opposite directions are recommended. Californian thistle may require repeat treatment.

TANK MIXTURES WITH GLYPHOSATE FOR BROADCAST SPRAYOUT OF PASTURES OR CROP STUBBLES PRIOR TO PLANTING FORAGE BRASSICAS, RYEGRASSES, MAIZE AND CEREALS:

Tankmixing Tramino with glyphosate will provide improved control of the broadleaf weeds outlined in tables 1 and 2, as well as clovers and oxeye daisy.

Apply Tramino at 0.5 or 1L/ha in mixture with glyphosate and a penetrant.

a) Use the appropriate glyphosate rate for controlling grass weeds.

b) Use the higher rate of Tramino where broadleaf weed density is high, when the weed foliage to root ratio is low or when weeds are growing slowly.

Best results will be achieved when applications are made to actively growing weeds before flowering.

Forage brassicas, ryegrasses, maize and cereals can be planted at any time after the application of glyphosate plus Tramino. However, to ensure herbicide absorption and translocation, it is recommended that grazing or cultivation is delayed for at least 1 day after application. If perennial weeds are present, do not graze or cultivate for 3 days.

For grazing intervals following application of glyphosate plus Tramino, refer to the withholding period and residues section of the label.

FORAGE BRASSICAS AND FORAGE PLANTAIN:
Note APPLICATION COMMENTS below.
DO NOT USE ON ANY FORAGE BRASSICA SEED CROP.

IMPORTANT: See Decontamination of Application Equipment, Application Comments for Forage Brassicas and Forage Plantain, Crop Rotation and Withholding Periods sections of the label before all applications to forage brassicas or forage plantain.

Weeds	L/Ha	Comments
Susceptible: 2-4 leaf Black nightshade, Willow weed **Moderately susceptible: 2-4 leaf** Amaranthus/Redroot, Fathen Fumitory, Water pepper	1.0	Clover plantback: minimum 6 months (See Crop Rotation section).
Susceptible: 2-4 leaf Amaranthus/Redroot, Fathen, Fumitory **Susceptible: 4-8 leaf** Black nightshade, Willow weed **Moderately susceptible: 1-2 leaf** Spurrey (pre 1st whorl)	1.5	Clover plantback: minimum 8 months. (See Crop Rotation section).
Susceptible: 1-2 leaf Spurrey (pre 1st whorl) **Susceptible:** Ragwort, Thistles	2.0	Clover plantback: minimum 12 months. (See Crop Rotation section). Do not apply this rate before the first grazing of seedling forage plantain (see application comments below). Thorough cultivation pre planting will improve control of Californian thistle.

NOTE: IN THESE AREAS, LEGUMES SUCH AS CLOVERS AND LUCERNE WILL BE REMOVED.

Application comments: Forage Brassicas and Forage Plantain:

Spraying oil:	ALWAYS apply Tramino in mixture with a spraying oil at 1L/ha.
Water rates and spray quality:	Ground broadcast application: Apply Tramino in 100-200 litres of water per hectare as a medium quality spray as defined by the British Crop Protection Council (BCPC) system or the American Society of Agricultural and Biological Engineers (ASABE – S572). Use of higher water rates will improve coverage and efficacy, especially where there is high weed density. Aerial application: Apply Tramino in 100-200 litres of water per hectare as a coarse quality spray as defined by BCPC and ASABE. CDA application: Use the large (250-300 micron) droplet size and apply not less than 30 litres of water per hectare.
Compatibility:	Tramino is compatible with most insecticides and grass weed herbicides recommended for use in forage brassicas and forage plantain. Consult your Adria representative for more information. Do not apply Tramino in combination with other products that are known to cause injury to forage brassicas or forage plantain.
Weed growth stage:	Apply when weeds are small and actively growing seedlings, as soon as possible after weed emergence.
Crop selectivity:	**Do NOT apply Tramino if crop stress is occurring, or is probable, as a result of lack of moisture, extreme temperatures, nutrient deficiencies or high pest and/or disease pressure.**
Forage brassicas:	Some transient cupping of leaves and height reduction may be evident after the application of Tramino to some forage brassica varieties. Normally, forage brassica yield will not be affected if there are good growing conditions. Tramino can be used in forage brassicas following pre-emergent applications of trifluralin. Application of some other herbicides prior to Tramino may result in injury to forage brassicas and suppression of yield. Consult with an Adria representative prior to application of other (pre or post emergent) herbicides if Tramino is to be applied.
Forage plantain:	There can be cupping and twisting of leaves, as well as height reduction, after a Tramino application. Some crop suppression can occur in the first few weeks after application. Yield will recover in good growing conditions. Grazing prior to application will reduce initial cupping and twisting of the leaves. Grazing soon after the 7 day withholding period will increase the speed of regrowth. Forage plantain sprayed with Tramino becomes more palatable, so ensure that stock do **NOT** overgraze treated crops. **Young forage plantain:** Preferably apply Tramino a few days **AFTER** the first grazing. While Tramino can be applied **BEFORE** the first grazing, DO NOT apply before the 5 leaf stage. If spraying BEFORE the first grazing, apply Tramino (1.0 – 1.5L/ha) **Established forage plantain** (**AFTER** grazing): apply Tramino (1.0 – 2.0L/ha).
Crop competition:	Crop competition will increase control of weeds that are only moderately susceptible. Crop competition is increased under good growing conditions and where the correct rate of seed is sown into a well worked, firm seed bed that is free of trash or large clods.

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