

CAUTION

KEEP OUT OF REACH OF CHILDREN
READ SAFETY DIRECTIONS BEFORE OPENING OR USING

PAYBACK[®]

Plant Growth Regulator

ACTIVE CONSTITUENT: 250 g/L PACLOBUTRAZOL

To reduce vegetative growth in mango, stone fruit and apple trees and for growth control of container grown ornamentals as per directions for use.

CONTENTS: 1L
5L
20L

Nufarm Australia Limited
ACN 004 377 780
103-105 Pipe Road, Laverton North Victoria 3026
Tel: (03) 9282 1000
nufarm.com.au

Payback[®] trade mark owned or used under license by Nufarm Australia Ltd.

DIRECTIONS FOR USE

DO NOT use on trees of low vigour or under stress (see General Instructions).

DO NOT use in orchards underplanted with any other crops.

DO NOT apply to young trees which have recently been interplanted in orchards and which are required to make vigorous growth.

DO NOT water over the top of ornamental plants for 24 hours after application

DO NOT use on cut flowers where successive crops are grown in the same soil/compost

DO NOT re-use potting media from treated plants for subsequent crops.

DO NOT apply to plants under stress

DO NOT apply by aircraft.

FRUIT TREES

Crop & Situation	State	Application Method	Rate	Critical Comments
Mango	Qld, NT & NSW only	Collar, Drench: <u>Trees 3 - 6 yrs old:</u> Light sands Clay, red volcanics <u>Trees over 6 yrs:</u> Light sands Clay, red volcanics	Per tree: 8 to 12mL 12 to 16mL Per tree: 16 to 20mL 20mL	Apply within 4 weeks after harvest or no later than mid February. Adjust rate within range according to tree age. Use high rate for older trees. Ensure trees are well watered before and after application. CAUTION: Do not treat young trees with a canopy of less than 3m diameter. CAUTION: Excessive compaction of flower panicles may result from application at times later than recommended, or from delayed uptake caused by dry soil conditions. Care should be taken to ensure correct insecticide application to control webworm in compact flower panicles. RETREATMENT: The effects of 'Payback' on flowering and growth may persist for more than one season. Sandy soils: Postpone retreatment until after the harvest following resumption of normal growth. Use the interval between the first treatment and resumption of normal growth as a guide to retreatment frequency in subsequent years. Clays & Red Volcanic Soils: Retreat each season. If reduction of growth increases progressively from season to season postpone treatment until after the harvest following the resumption of normal growth.
Apples - Red Delicious & Granny Smith	All States	Spray	500mL or 1L/ha Add 18mL Shirwet 600 or Nufarm Surfactant 600 per 100L water in final spray volume	Apply in a sequential spray program commencing 28 days after full bloom on Red Delicious or 35 days after full bloom on Granny Smith. Use lower rate on less vigorous trees. Apply subsequent sprays at the lower rate at intervals of 21 days for as long as growth control is required. Activity results from uptake of chemical by young green stem tissue. Do not apply more than 4L/ha per season. CAUTION: If using Carbaryl as a chemical thinning agent, plan to allow 21 days between application of Carbaryl and Payback.
Peaches Nectarines	All States	Trickle irrigation Collar drench	2L/ha 2 to 4L/ha	Apply in early Autumn or in Spring between 14 days prior to bud burst and full bloom. Late Summer or early Autumn application is recommended for early maturing cultivars. Divide rate per ha by the number of trees per ha to determine the rate per tree. Use high rate on medium and heavy soil types. RETREATMENT: Retreat trees with 2L/ha (Trickle) or with 2 or 3L/ha (Collar drench) in subsequent season. Rates of application for retreatment may be reduced if a lesser degree of growth control is desired. On light soils, retreat when normal growth resumes. Use the low rate for retreatment of low vigorous varieties in cool districts.
Apricots Plums	All States	Trickle irrigation Collar drench	2L/ha 2 to 4L/ha	Apply in early Autumn or in Spring between 14 days prior to bud burst and full bloom. Bloom dates may be advanced. In plums, ensure that pollinator trees are treated at the same time to synchronise flowering. Divide rate per ha by the number of trees per ha to determine the rate per tree. Use high rate on medium and heavy soil types. RETREATMENT: Do not retreat until the season in which normal growth resumes.

Cherries	All States	Trickle irrigation Collar Drench	1L/ha 1 to 2L/ha	Apply in early Autumn or in Spring between 14 days prior to bud burst and full bloom. Use high rate on medium and heavy soil types. Bloom dates may be advanced. Ensure that pollinator trees are treated at the same time to synchronise flowering. Divide rate per ha by the number of trees per ha to determine the rate per tree. RETREATMENT: Do not retreat until the season in which normal growth resumes.
-----------------	------------	---	-------------------------	---

CONTAINER GROWN ORNAMENTALS

Crop/Situation (Container grown plants)	Dilute Rates of Application* (refer to dilution instructions below table)		Critical Comments
	Pot drench solution	Foliar* spray	
Chrysanthemums: To produce compact plants	-	48mL dilute stock solution made up to 1L with water	Apply after pinching when new shoots are 1-2 cm long. Apply further 1-3 applications at 14 day intervals under rapid growth conditions and for vigorous varieties.
Bouvardia: To produce compact plants	8mL dilute stock solution made up to 1L with water	96mL dilute stock solution made up to 1L with water	Foliar spray Apply after pinching when new shoots are 1-2 cm long. Apply further 1-2 applications at 14 day intervals under rapid growth conditions. Pot drench Apply 50 mL of drench solution per pot, after pinching when regrowth is 1-2 cm long.
Rhododendron: To produce compact plants and induce earlier flowering	-	200mL dilute stock solution made up to 1L with water	Apply single spray in January to control autumn growth flush.
Camellia japonica: To produce compact plants	-	200mL dilute stock solution made up to 1L with water	Apply single spray in spring to control summer growth flush.
Eucalyptus spp.: Grevillea spp.: To produce compact plants	40mL dilute stock solution made up to 1L with water	-	Apply 50 mL of drench solution per pot when growth control is required.
Zonal geranium: To produce compact plants	-	16mL dilute stock solution made up to 1L with water	Apply to plants when 7-8 cm high (3-5 leaves expanded). Repeat application as required.
Marigold: To produce compact plants	4mL dilute stock solution made up to 1L with water	-	Apply 50mL of drench solution per pot 2 weeks after transplanting.
Geraldton wax flower: (Chamelaucium uncinatum) To produce compact plants	32mL dilute stock solution made up to 1L with water	-	Apply 50mL of drench solution per pot 2 weeks after rooted cutting potted.

* Prepare a dilute stock solution first by measuring 10mL of Payback and diluting to 1 litre in water. The dilute stock solution is then added to water at the rates shown in the above table. Prepare a fresh stock solution each day.

* Note: Multiple applications may cause delay in flowering in some species, for example chrysanthemums.

NOT TO BE USED FOR ANY PURPOSE, OR IN ANY MANNER, CONTRARY TO THIS LABEL UNLESS AUTHORISED UNDER APPROPRIATE LEGISLATION.

WITHHOLDING PERIOD

APPLES - DO NOT HARVEST FOR 21 DAYS AFTER APPLICATION.

GENERAL INSTRUCTIONS

Payback is a systemic growth regulator that reduces internode lengths of new shoots and causes earlier formation of terminal buds and controls plant height in a range of ornamental plants. Use of Payback should begin only when trees are nearing their optimum size. It is most suited to intensively managed orchards where trees are near to filling their allocated space and growth

control is a prime requirement. It is not suitable for old or unhealthy trees. This product is also used in production of the pot and container grown flowers and foliage plants listed in the direction of Use table.

If a tree is under stress, Payback should NOT be used.

Stress can be caused by: moisture shortage due to lack of rain, or inadequate irrigation; high temperature; salinity; moisture excess due to water table, flooding or inappropriate irrigation; severe or successive frosts; poor fertility caused by imbalance of major or minor nutrients; diseases; insects; inappropriate herbicide use; mechanical damage.

Tree Management

Treated trees may produce heavier crops and require a higher level of fertiliser application. Ensure that treated trees are not over-watered or subjected to drought stress. In some instances, treated trees may set excess fruit and careful attention should be given to thinning operations. When replanting a treated orchard, at least three years should elapse since the last application of Payback. In orchards which have been treated with collar drenches of Payback, fresh soil should be provided to allow tree establishment and growth. Remove treated soil. An alternative is to avoid original tree holes, and place young trees as far as practicable from the treated soil (minimum 1.5m).

Where young trees are required to be planted in an established orchard which has been treated with collar drenches of Payback, remove treated soil and replace with fresh soil.

MIXING

Fruit Trees

Foliar spray: Half fill spray tank with clean water, add the required quantity of Payback and Shirwet 600 or Nufarm Surfactant 600 and agitate during the completion of filling. Frequent or constant agitation of the spray mixture is recommended. Wash out spray tank thoroughly after use.

Collar drench: Mix required volume of Payback with recommended volume of water. Periodic agitation may be necessary to prevent settling.

Ornamentals

A dilute solution of Payback in water must be made first. Measure 10mL of Payback and dilute in water to make up to a total volume of 1L. The dilute stock is then further diluted with water as per the rates indicated in the table above for container grown ornamentals. As an example, for foliar use on rhododendrons, add 200mL of dilute stock solution to 800mL of water to make up to a total volume of 1L spray solution.

Half fill spray tank with clean water, add the required quantity of Payback and agitate during the completion of filling. Frequent or constant agitation of the spray mixture is recommended. Wash out spray tank thoroughly after use.

APPLICATION

Fruit Trees

Foliar sprays: Apply in a sufficient volume of water to ensure penetration of the spray and good coverage of target tissue, new green stem tissue in the case of apples. Apply in a minimum volume of 1000L of water per ha. Shirwet 600 or Nufarm Surfactant 600 at 18 mL/100L of water must be added to the final spray volume. It is not normally necessary to reapply the spray if rain follows soon after application.

Collar drench: Up take of Payback is most efficient when it is applied to soil which receives adequate water and where there is a high density of feeder roots.

Apply required amount of Payback in 0.5 to 2 L of water per tree onto the soil/trunk crack line evenly around the base of the trunk. Where specific rates per tree are not given, the application rate per tree is determined by dividing the application rate per ha by the number of trees per ha. The volume of diluted drench required for even application without runoff will vary with the size of the tree and with soil type and moisture content. Use the higher volume on large trees.

Ensure that trees are adequately irrigated following treatment under dry conditions. Individual trees which are smaller than average should be left untreated or given a proportionally smaller dose of Payback.

Trickle point: Apply in 200-300 mL water per tree beneath each trickle or dripper point. Follow application with a short period of irrigation. Alternatively, the required amount of Payback can be

applied through the trickle irrigation system. Equal distribution of water between trees is essential for this method to give a uniform effect.

Retreatment: In some cases, control of growth may persist for more than one year. Retreat trees when normal growth resumes. Use the interval between the first treatment and the resumption of normal growth as a guide for retreatment in subsequent seasons.

Ornamentals

Foliar spray: Spray when foliage is dry. Use 2 litres of spray solution per 10m² or sufficient to give thorough coverage of plants. Activity results from chemical uptake by young green stem tissue.

Pot/Soil Drench: Avoid loss of chemical through excessive free drainage by restricting watering before and after application. Use 50mL drench solution per pot to ensure uniform distribution.

Rate of use and spray timing:

Response to treatment with 'Payback' can vary depending on variety, stage of growth and local environmental conditions. Growers are therefore advised to use 'Payback' in small scale tests at the recommended rates before extensive use. Rates may need to be increased or reduced according to local conditions.

COMPATIBILITY

Payback is compatible with any one of the following products: Nimrod[®], Betamite[®], Pirimor[®] or Dithane[®]. However, mixing Payback with more than any one of these products may give unpredictable results or may result in crop damage. If Carbaryl is used as a thinning spray on apples, allow 21 days before application of Payback. DO NOT use this product with other Chemicals for use on ornamental plants.

PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

DO NOT contaminate streams, rivers or waterways with the chemical or used container.



spraywisedecisions.com.au is an online weather forecasting program and is recommended for use when planning your pesticide application.

STORAGE AND DISPOSAL

Store in the closed, original container in a cool, well ventilated area. Do not store for prolonged periods in direct sunlight. Triple-rinse containers before disposal. Add rinsings to spray tank. Do not dispose of undiluted chemicals on-site. If recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling, break, crush, or puncture and deliver empty packaging to an approved waste management facility. If an approved waste management facility is not available, bury the empty packaging 500mm below the surface in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots, in compliance with relevant Local, State or Territory government regulations. Do not burn empty containers or product.

SAFETY DIRECTIONS

Avoid contact with eyes and skin. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water.

FIRST AID

If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia 13 11 26.

ADDITIONAL STATEMENTS (WHS REGULATIONS 2011)

Suspected of damaging fertility or the unborn child. Harmful if swallowed. Harmful if inhaled. Causes serious eye irritation. Causes skin irritation. May cause damage to organs through prolonged or repeated exposure. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Wear protective gloves, clothing, eye and face protection. Do not breathe spray. IF SWALLOWED: Rinse mouth. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.

SAFETY DATA SHEET

For further information refer to the Safety Data Sheet (SDS), which can be obtained from your supplier or from the Nufarm website – nufarm.com.au

In case of emergency: Phone 1800 033 498 Ask for shift supervisor. Toll free 24 hours

CONDITIONS OF SALE

“Any provisions or rights under the Competition and Consumer Act 2010 or relevant state legislation which cannot be excluded by those statutes or by law are not intended to be excluded by these conditions of sale. Subject to the foregoing, all warranties, conditions, rights and remedies, expressed or implied under common law, statute or otherwise, in relation to the sale, supply, use or application of this product, are excluded. Nufarm Australia Limited and/or its affiliates (“Nufarm”) shall not accept any liability whatsoever (including consequential loss), or howsoever arising (including negligence) for any damage, injury or death connected with the sale, supply, use or application of this product except for liability which cannot be excluded by statute.”

© All trade marks owned or used under license by Nufarm Australia Ltd.

* Other trade marks

Nufarm Australia Limited
ACN 004 377 780
103-105 Pipe Road, Laverton North Victoria 3026
Tel: (03) 9282 1000
nufarm.com.au

APVMA Approval No.: 58627/109805

BN / DOM / Barcode / Drummuster