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Explanation of abbreviations where used:

App rate = Application rate

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Crop	Pest	State	App Rate	Critical Comments
Litres of Oil in Dilute Spray Per 100L Water				
Bananas	Scale Insects	QLD, NSW, ACT, WA	2L	Apply when heavy scale populations occur on stem, foliage or fruit. Do not apply if trees need watering. Application is most effective against your crawler stages.
	Cercospora Leaf Spot	NSW, ACT	4L	Apply in combination with mancozeb at 2.2-4.5 kg/ha in 200 to 500L of water. Apply at 3-4 week intervals, from December until late April. In North Queensland the interval may be reduced to 10-14 days in the wet season.
		QLD	3.5L	
	Cercospora Leaf Spot, Leaf Speckle	NSW, ACT, STH, QLD, WA	12L	As above or apply in combination with Benlate, 300g/ha in at least 12L of water. Apply as a mist, starting in November/early December and continue to apply at intervals of not more than 3 weeks until April. Cover both sides of leaves.
NSW, ACT, STH, QLD, WA		5L	Apply in combination with Tilt 250 EC. Commence spraying in December and apply 4 to 5 times at 21-day intervals. Later use alternative fungicides if needed. Spray both sides of leaves.	
		NTH QLD	5L	Apply in combination with Tilt 250 EC. Spray every two weeks from the start of the wet season in December and make a maximum of 6 applications. Later use alternative fungicides if needed. Spray both sides of leaves.

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Crop	Pest	State	App Rate	Critical Comments
Litres of Oil in Dilute Spray Per 100L Water				
Apples	Mites (Eggs), including European Red Mite, Scales (Hard & Soft)	NSW, ACT, VIC, SA, WA, TAS only	2L	Dormant or delayed dormant to half green tip
		QLD	3L	
Pears	European Red Mite, Eggs, Scales	NSW, ACT, VIC, SA, WA, TAS only	1-2L	Dormant or delayed dormant (up to and including petal fall)
		TAS Only	2L	
		QLD	3L	
Pears	Two Spotted Spider Mite	NSW, ACT, VIC, SA, WA, TAS Only	1L	Summer (Foliar or Cover) or Post Harvest
	Brown Mite, Pear Rust Mite	NSW, ACT, VIC, SA, WA, TAS only	1-2L	
	Pear Leaf Blister Mite	NSW, ACT, VIC, SA, WA, TAS, WA only	1.5-2L	
Cotton	Defoliation Aid	NSW, ACT, QLD, WA	2L	Apply in combination with thiazuron (eg DROPP®) defoliant
	Carrier for certain ULV insecticides	NSW, QLD only	3-5L/ Ha	Apply in combination with ULV insecticides as specified on the insecticide label to ensure insecticide reaches its target.

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Crop	Pest	State	App Rate	Critical Comments
Litres of Oil in Dilute Spray Per 100L Water				
Apricots	San Jose Scale	NSW, ACT, VIC, SA, WA only	2L	Dormant
		QLD	3L	
Cherries	Mites and Scales	NSW, ACT, VIC, SA, WA, TAS only	1-1.5L	Summer (Foliar or Cover) or Post Harvest. Applications should not be made over oil sensitive varieties. Do not apply to trees lacking adequate moisture
Almonds Peaches Nectarine	Aphids (Eggs), Mites (Eggs)	NSW, ACT, VIC, SA, WA, TAS Only	3L	Dormant or delayed dormant
	San Jose Scales	NSW, ACT, VIC, SA, WA only	2L	Dormant
	Mites and Scales	NSW, ACT, VIC, SA, WA only	1-2L	Summer (Foliar or Cover) or Post Harvest

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Crop	Pest	State	App Rate	Critical Comments
Litres of Oil in Dilute Spray Per 100L Water				
Plums Prunes	Aphids (Eggs) Scales Mites (Eggs)	NSW, ACT, SA, WA, TAS only	1.5-2L	Dormant or delayed dormant. To half green tip.
	Mites Scales	NSW, ACT, VIC, SA, WA, TAS only	1-1.5L	Summer (Foliar or Cover) or Post Harvest Do not apply over fresh market fruits after bloom starts to form as the oil will remove the bloom. Application should not be made over sensitive varieties.
Custard Apple	Scale Insects	QLD NSW, ACT, WA	1 to 1.7L 2L	Apply when heavy scale populations occur on stem, foliage or fruit.
Mango	Scale Insects	QLD WA	1.25L 2L	Do not apply if trees need watering. Application is most effective against young crawler stages.

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Crop	Pest	State	App Rate	Critical Comments
Litres of Oil in Dilute Spray Per 100L Water				
Pecans	Aphids (Eggs) Scales Mites (Eggs)	NSW, ACT, QLD, SA, WA, TAS Only	3L	Dormant
	Aphids Mites	NSW, ACT, QLD, SA, WA, TAS Only	1-1.5L	Summer (Foliar or Cover) or Post Harvest
Avocado	Scale Insects	QLD	1.2L - 1.6L	Apply when heavy scale populations occur on stem, foliage or fruit.
		NSW, ACT, WA	2L	
Kiwi Fruit	Scale Insects	QLD	1.0L - 1.6L	Do not apply if trees need watering. Application is most effective against young crawler stages.
		NSW, ACT, WA	2L	

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Crop	Pest	State	App Rate	Critical Comments
Litres of Oil in Dilute Spray Per 100L Water				
Shade Trees* and Shrubs including Cornifers, Deciduous Broadleaf Evergreens and Woody Ornamentals, Ornamental Trees* Shrubs along city streets, other rights of way including Deciduous and Broadleaf Evergreens.	Aphids Scales (immature) Spider Mites Whitefly (immature)	NSW, ACT, VIC, SA, WA, TAS only	2-4L (Winter)	Winter Dormant period as needed for plants that become dormant in Winter.
			1-3L (Summer)	Summer (Foliar or Cover) as needed.
Flowers and Foliage Plant including Roses and other Flowering Shrubs, Foliage Ornamentals and Bedding Plants			2-3L (Winter)	Winter Dormant period as needed for plants that become dormant in Winter
			1-2L (Summer)	Summer (Foliar or Cover) as needed
Christmas Trees	Aphids Scales (Soft & Hard) (Immature) Spider Mites		2-4L (Winter)	Winter
			1-3L (Summer)	Summer

CAUTION: Spray no more than 4 times during growing season with two weeks minimum application interval. **Do not spray when buds are fully opened and/or shoot elongation is occurring.** Do not spray when there is no obvious moisture in the leave or the plant is under stress. Avoid spraying open blooms. Bleaching and spotting has been observed w open blooms of certain plants.

Oil removes the glaucous (blue) bloom from some evergreens. Always use lower dosage test spray oil sensitive plants first – do not spray walnut foliage.

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Crop	Pest	State	App Rate	Critical Comments		
Litres of Oil in Dilute Spray Per 100L Water						
Blueberries	Mites, Scales	All States	2L	Foliage		
			3L	Dormant		
Strawberries	Aphids	NSW, ACT, SA, WA, TAS only	1L	Dormant and Foliage		
	Mites					
Grapes	Mealybugs	NSW, ACT, QLD, SA, WA, TAS Only	4-6 Litres with 306 to 460 Litres Water per Hectare	Dormant – A tank mix using insecticides improves control.		
			Grapevine scale	NSW, Vic, SA, WA, QLD only	3L/100L	Apply as a post pruning spray in mid-winter when vines are fully dormant
				Tas only	2L/100L	
Asparagus Beans Beet Corn Cucurbits Peppers / Capsicums Radish Squash Tomatoes	Aphids Mites Thrips Leafhopper	All States except QLD for beans, tomato, corn, and peppers/capsicum	1-2L	As needed		

Crop	Pest	State	App Rate	Critical Comments
Litres of Oil in Dilute Spray Per 100L Water				
Corn (Sweet and Field) Sugar Beet	Aphids Mites Whitefly Bugs - Immature	NSW, ACT, SA, TAS, WA only	2L	As needed
Chrysanthemum Differbachia Dracaena Ferns Gardenias Jade Plant Palms Philodendron	Aphids Scales Whitefly	All States	1L-2L	Do not apply to plants in direct sunlight behind glass. Do not use on Coconut Palms and Maidenhair Ferns. Chrysanthemum blooms have shown phytotoxic symptoms at the higher rate.
			2.5ml – 5.0ml	Applicator should conduct a test for phytotoxicity by treating a few specimens before making a large-scale application. Protect floor, floor coverings and furnishings from overspray.
Wetting agent/adjvant/carrier as recommended on fungicide and insecticide labels	Refer to particular pesticide label	All	500mL – 5L	BIOPEST® acts as a carrier/adjvant/wetting agent which may improve the performance of certain pesticides. Always check pesticide label for correct rates.

Crop	Pest	State	App Rate	Critical Comments
Litres of Oil in Dilute Spray Per 100L Water				
Azalea Begonia Camellia Chrysanthemum Crown of Thorns	Aphids Mealybugs Scale (Soft and Hard) Thrips Whitefly (Immature) Reduces number of Spider mites	All states	10 – 20ml OR 1L-2L	Do not apply to plants in direct sunlight behind glass. Do not use on Coconut Palms and Maidenhair Ferns. Chrysanthemum blooms have shown phytotoxicity symptoms at the higher rate.
Differbachia*			10 ml OR 1L	Applicator should conduct a test for phytotoxicity by treating a few specimens before making a large-scale application. For greenhouse pests listed use once a week initially then as the pest is controlled decrease the frequency to every 2 – 3 weeks as needed.
Easter Lilly Fern Gardenia Hibiscus Foliage Jade Plant Palm Philodendron			10-20ml OR 1-2L	
Poinsettia			10ml OR 1L	
Reiger Begonia Zinnias			10 – 20ml OR 1-2L	
Hardy Plants	Leaf Polish	All States	10ml OR 1L	

* Oil removes the glaucous (blue) bloom from some evergreens. Always use lower dosage or test spray oil sensitive plants first – do not spray walnut foliage.

Crop	Pest	State	App Rate	Critical Comments
Litres of Oil in Dilute Spray Per 100L Water				
Citrus	Redscale	VIC, SA, WA	1-2L	Apply in December and / or February – March.
		NSW, ACT	1.3-2L	
		QLD	1L	Apply late November/early December and late January/early February if required – apply in combination with Methidathion 50mL/100L
	White Wax Scale	VIC, WA	1-2L	Apply in December / early January Period
		NSW, ACT	2L	
	Pink Wax Scale	QLD	1L	Apply late November/early December and late January/early February if required. Apply in combination with methidathion 50mL/100L, carbaryl 70g/100L, promecarb 50g/100L, soda ash 500-750g/100L or washing soda 500-750g/100L.
White Wax Scale				
Pink Wax Scale	TAS, WA	1.8 – 2.5L	Apply December / early January. Repeat in February	
Black scale				
Soft Brown Scale	TAS, WA	1.8 – 2.5L	Apply in January / April	

Crop	Pest	State	App Rate	Critical Comments
Litres of Oil in Dilute Spray Per 100L Water				
Citrus	Black Spot	NSW, ACT	200mL	Apply in combination with Benomyl 50% WP 50g/100L 16 weeks after a copper spray at petal fall. Do not apply this combination to trees carrying mature fruit in order to avoid encouraging the development of tolerant strains of fungal diseases.
	Citrus Leaf-miner	All States	250mL – 500mL (for Citrus Leaf-miner Control only) 500mL – 1L (when combining with Scale & Black Spot Control	Apply thoroughly and evenly to flush growth, wetting both sides of all immature leaves to point of run-off. Spray every 5 to 14 days during flush periods, commencing as soon as pest's silvery mites are observed on young leaves. The interval will be shorter during summer and early autumn. Cease spraying when leaves become mature. Four sprays in one year should be sufficient to achieve control and no more than 8 sprays should be applied.

DIRECTIONS FOR USE

RESTRAINTS:

DO NOT spray when temperatures exceed 32°C, (except where noted for Citrus) or when soil is dry and trees are suffering from moisture stress.

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

**WITHHOLDING PERIOD:
DO NOT HARVEST FOR 1 DAY AFTER APPLICATION**

GENERAL INSTRUCTIONS:

This product controls Aphids, Lace Bugs, Leaf Hoppers, Mealybugs, Mites, Plant Bugs, Scale, Whitefly, and eggs of Aphids, Mites on Vegetables, Fruit Trees, Nuts Trees, certain field crops, Shrubs, Plantation Trees, Greenhouse Plants, Ornamental Foliage Plants and Flowers.

BIOPEST® can be used in combination with certain fungicides, herbicides and insecticides as a wetting agent/adjvant/carrier as specified on the products label.

MIXING INSTRUCTIONS:

- Add water to the mixing tank to allow proper agitation by pump or paddles.
- Add other desired pesticides.
 - If wettable powder formulation – mix water and powder thoroughly so that powder is totally suspended in the water before the oil is added.
 - If other pesticide to be added is an emulsifiable formulation, do so after the oil and water has been thoroughly mixed.
- Add oil under agitation when tank is ¾ full. Top off with water to form a milky solution.
- Maintain agitation until solution is completely used.
- In a small equipment lacking agitators, stir or shake diluted spray frequently during applications.
- It is important for users to read and follow all instructions on the labels of the proposed tank mixed products.

- Flush fluid in sprayer hose lines back into tank reservoir if fluid is allowed to stand for more than 20 minutes.

APPLICATION INSTRUCTIONS

- The target must be completely covered in spray.
- Oil residue on the plants surface often acts as a feeding and oviposition deterrent. However, the primary target is the pest itself as BIOPEST® is a contact pesticide.
- Dilute applications (greater than 1400L spray per hectare in horticultural crops) in most cases ensures best coverage.
- Speed of travel is extremely important, tractor speed from 1.6kph to 5.4 kph is recommended, depending on crop size and target pest.
- Do not spray when shade temperatures are or exceed 32°C.

COMPATIBILITY

- BIOPEST® can be used with such pesticides as NPVs, BTs, Pyrethroids, Abamectin, Tracer I®, Mancozeb and Follicur® as stated on their respective directions for use labels.
- Do not use spray oil with Dimethoate, or any other product containing sulphur.
- If possible, either keep the spray equipment used for these compounds separate from the equipment used for BIOPEST® Paraffinic Oil, or make sure that the sprayer is thoroughly cleaned, so that no residue from these compounds remain.
- Do not use with Carbaryl on deciduous fruit trees.

TANK MIXTURES

- This product may be mixed with other pesticides to improve the level of kill or enhance coverage. User should read and follow all instructions on the label of the proposed tank mixed product.

TIMING THE TREATMENT

- Applicator must determine the precise timing to fit local growth and climate conditions. Do not exceed maximum rates or apply more often than recommended.
- May be used up to one day before harvest.

PROTECTION OF LIVESTOCK, WILDLIFE, FISH, CRUSTACEAN AND THE ENVIRONMENT

Dangerous to fish. Do not contaminate streams, rivers, waterways with chemicals or used containers

PROTECTION OF CROPS, NATIVE & OTHER NON-TARGET PLANTS

Do not apply pesticides or other chemicals incompatible with oil, within 4 weeks before or after application of any other spray oils, as crop damage may occur.

STORAGE AND DISPOSAL

Store in the closed, original container in a cool, well-ventilated. Do not store for prolonged periods in direct sunlight. Triple or preferably pressure 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 bury the empty containers in a local authority landfill. If no landfill is available, bury the containers below 500 mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and product should not be burnt.

Refillable Containers: Empty containers fully into application equipment. Close all valves and return to point of supply for refill or storage. All 110 litre and 1000 litre containers remain the property of SACOA Pty Ltd.

FIRST AID

If poisoning occurs, contact a doctor or Poisons Information Centre. (Phone 13 11 26). If swallowed do NOT induce vomiting. Give a glass of water.

MATERIAL SAFETY DATA SHEET

Additional information is listed in the Material Safety Data Sheet (MSDS).

NOTICE TO BUYER

SACOA Pty Ltd accepts no responsibility for any consequence whatsoever arising from the use of the product other than that used in accordance with this label.

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NRA APPROVAL NO : 54179/0403

SACOA
BIOPEST
PARAFFINIC OIL

Active constituent: 815 g/L PARAFFINIC OIL (AS 1888-1976)
UNSULPHONATED RESIDUE NOT LESS THAN 98.0%

A NARROW RANGE EMULSIFIABLE PARAFFINIC OIL
FOR THE MANAGEMENT OF PESTS AS PER
DIRECTIONS IN THIS INSTRUCTION BOOKLET.

INSTRUCTION BOOKLET

IMPORTANT: Read this leaflet before use.

UNFOLD THIS SHEET TO VIEW INSTRUCTIONS.
SECTIONS ARE NUMBERED (1- 14) AND COVER
BOTH SIDES.

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