

## ORC Evidence requirements for the nursery production industry

### Bare root stock production and large bare rooted plants (Perennial Trees)

There are three Owner Reimbursement Costs (ORC) Evidence Framework formulas for the nursery production industry:

- Annual Short Rotation Crops Nursery Production - This may include starter crops (seedlings, plug and tube stock production), annual and perennial potted colour, trees and shrubs (ornamental, fruit and vine, landscape, rehabilitation, etc.), foliage plants, palms, in-ground and mother stock (as per APVMA labelling) that are sold at less than 12 months of age.
- **Bare Root Stock production / Large Bare Rooted Plants that are sold at greater than 12 months of age.**
- Root Stock Production / Large Rooted Plants that are sold at greater than 12 months of age.

Regardless of the formula used, the ORC Evidence Frameworks will only apply to growers from the nursery production industry. Retail outlets are not covered by these frameworks.

ORCs for nursery bare root stock production and large bare rooted plants are calculated using the formula for Perennial Plants (*Schedule 6, Part 4.4.13 of the Emergency Plant Pest Response Deed*, issued 22 August 2018). This formula is: **ORC = (A-B) + C + D + E + F + G + H + I**

#### Revision history

Version	Date issued	Amendment Details	
		Element(s)	Details
Draft	Draft	All	Full revision of 2008 draft. Provided to NGIA for consideration and approval. Provided to government Parties for endorsement 11 August 2014.
1.0	1 Sep 2014	All	Endorsed by NGIA, all government Parties and PHA Board for use in the Chestnut blight Incident only. Endorsed by PHA Board.
2.0	Draft	A, E and I	Full revision. Minor amendments to elements A, E and I. Provided to NGIA for consideration and approval. Provided to government Parties for endorsement 14 August 2018.
2.0	10 Oct 2018	All	Endorsed by NGIA, all government Parties and PHA Board.

	Definition of Elements from the EPPRD	Evidence requirements (in hierarchical order)	Additional Information
<b>A</b>	Loss of profit from the current Crop destroyed = a * y * p		
	<p>a = area of tree Crop destroyed y = expected yield based on Owners' past records, taking into account any biennial bearing patterns. In particular, Owners claiming above average yields (and prices) must produce auditable records of above average returns in previous years to justify additional amounts in Owner Reimbursement Costs.</p> <p>If the Owner has no records, the regional average for that Crop is to be used.</p> <p><b>IMPORTANT NOTE:</b> Area and yield are terms not applicable to nursery bare root stock production (perennial trees). In this case,</p> <ul style="list-style-type: none"> <li>• "a" equals the number of units of a particular species/variety.</li> <li>• "y" equals type of units expected to be sold as per container type such as pots, bags (including plastic wraps) and inground.</li> </ul> <p>This aligns with the descriptions under clause 4.4.12 of Schedule 6.</p>	<p>Certification/assessment of the <b>area</b> and <b>yield</b> of tree Crop destroyed by an Authorised person using one of the following methods:</p> <ol style="list-style-type: none"> <li>1. Auditable business records of the <b>number and type of units</b> (e.g. numbers of plants at different stages of development and their breakdown if there are multiple types) of plants under production and their movement through a facility.</li> <li>2. Where this is not available, the <b>number and types of units</b> of a particular species or variety will be determined by an on ground survey and plant count at the time of the incursion.</li> </ol>	<ul style="list-style-type: none"> <li>• An on the ground survey, including a plant/tree count and variety confirmation will be required to verify the area and type of Crop to be destroyed at the time of the incursion. This will be carried out by an Authorised person.</li> <li>• There may be a number of different types of units moving through the facility. These units may also be at different stages of production/development.</li> <li>• Crops are covered where they are still owned by the grower, even if in transit. This includes the scenario of a nursery Crop losing its value because it is prohibited from moving off-site (not destroyed).</li> <li>• The jurisdictional legislative instrument (by whatever name) will identify the quarantine zone, and the Lead Agency must hold appropriate records of the area of Crop Affected.</li> </ul>
	p = market price at farm gate at harvest time	<ol style="list-style-type: none"> <li>1. The price for stock to be destroyed will be taken from the production nursery's pre-existing product / pricing lists.</li> <li>2. Where these lists are not available, or there is a large change in price due to the incursion, the price will be taken from the most recent price or invoice (excluding freight costs if these are not separately</li> </ol>	<ul style="list-style-type: none"> <li>• Plant value may be based on Industry average although there are major differences based on plant species/variety, plant size/age, business status and location.</li> <li>• Advice on Industry averages would take into account current prices at 'Greenlife Markets' or online trade only platforms. 'Greenlife Markets', commonly referred to as wholesale plant markets, and online trade only websites are trade-only businesses that</li> </ul>

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		<p>itemised), prior to the incursion.</p> <p>3. Where production nursery records are not available, advice will be sought from NGIA on an appropriate Industry average for the Crop in question for the current year.</p> <p>The normal percentage breakdown for stock destination will also be derived from records of the previous year.</p>	<p>supply greenlife products to the landscape, horticultural, local government, retail nursery and development sectors. Greenlife products are sourced from a variety of production nurseries across Australia and are displayed for purchase by trade only businesses.</p> <ul style="list-style-type: none"> <li>• Recent invoices may also be sourced from customer records where available.</li> <li>• The price for stock will vary with the destination of the stock (e.g. production nursery, wholesale, retail, other end users).</li> <li>• This also includes things such as Plant Breeder's Rights (PBR) labels and normal labels purchased and stored as a redeemable product/business cost.</li> <li>• The plant species/variety determines the time the plant will take to reach a specific size.</li> <li>• There is no standard or uniform pricing due to the diverse markets and end users.</li> </ul>
B	<p>= Harvesting costs based on 'best practice' as estimated by State/Territory departments of agriculture, plus any other costs (such as watering or pruning costs) normally associated with Crop production between the time of tree destruction and harvest.</p>	<p>Assessment of the gross margin to occur on an individual Owner by Owner basis using auditable records and applying best practice and industry average costs where necessary (i.e. where no records for some or all elements exist).</p>	<ul style="list-style-type: none"> <li>• In this case, for production nurseries, harvesting equates to dispatch costs (picking detailing, packaging).</li> <li>• Production nurseries in Australia have significant diversity in cropping and target markets.</li> <li>• The usual dispatch operations and costs for preparing produce for market include: <ul style="list-style-type: none"> <li>○ Product picking, grading and detailing</li> <li>○ Labelling and staking</li> <li>○ Packaging for shipment</li> </ul> </li> <li>• The normal handling and production costs depend on unit type, species and end user.</li> <li>• Transport costs may not be transparent as transport costs may be built into plant cost. Freight may not be included separately. The industry average percentage will be used if freight is not itemised separately.</li> <li>• Labels are purchased on the basis of plants grown</li> </ul>

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			and often royalties paid as part of label cost. The cost of the royalty would be included in “p”.
<b>C</b>	= Direct costs associated with the Response Plan incurred by the Owner but not normally incurred as a production expense.	<p>This will depend on what the Response Plan requires and will need to be calculated on an Incident by Incident basis with costs estimated using standard local or regional contract prices and industry data as appropriate.</p> <p>Assessment of the dispatch and any other costs <b>normally</b> associated with Crop production to be assessed on an individual Owner by Owner basis using auditable records and applying best practice and industry average costs where necessary.</p> <p>A schedule of costs additional to these, where required by the Response Plan, will be developed by the Lead Agency in conjunction with NGIA at the time of the Incident.</p>	<ul style="list-style-type: none"> <li>• Required actions/treatments by Owners need to be specifically defined in a Response Plan.</li> <li>• The legislative order needs to specify the actions/treatments required by the Owner.</li> <li>• Loss of breeding stock (this includes mother stock) in a research / breeding program is included here and not in “I”. Where mother stock is replaced on a rotation basis, values are to be depreciated accordingly.</li> <li>• This includes plant and container destruction and disposal as required in the Response Plan unless these costs are factored in elsewhere in the Response Plan.</li> </ul>
<b>D</b>	= Replacement value of any capital items destroyed as part of the Response Plan.	<p>Replacement value of any capital items destroyed will depend on what the Response Plan requires and will need to be calculated on an Incident by Incident basis.</p> <p>Prices will be sourced from suppliers like:</p> <ul style="list-style-type: none"> <li>• Landmark;</li> <li>• Elders;</li> <li>• Roberts; or</li> <li>• Other specialist suppliers at the time of the Incident.</li> </ul> <p>Costs are to be determined in accordance with a schedule of market values for items expected to be destroyed, replacing like with like, and agreed by Relevant Parties at the time of developing a Response Plan.</p>	<ul style="list-style-type: none"> <li>• The legislative order needs to identify the item requiring destruction.</li> <li>• Known capital items requiring destruction need to be specified in a Response Plan.</li> <li>• However, some items cannot be replaced until the fallow period ends. The price of these items is likely to increase during the fallow period. As such, an appropriate rate of input price inflation must be determined and applied to these prices. Subsequent values are then depreciated.</li> <li>• Replacement value of any capital items destroyed as an unintended consequence of an eradication program need to be included in this element, but will not necessarily be specified in the Response Plan. Unintended destruction of capital items will be dealt with on an Owner by Owner basis.</li> <li>• Capital items could potentially include:</li> </ul>

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			<ul style="list-style-type: none"> <li>○ Weed mats</li> <li>○ Shade cloth</li> <li>○ Pumps and irrigation equipment</li> <li>○ Gravel</li> <li>○ Structures such as shade houses and polyhouses.</li> </ul>
<b>E</b>	<p>= Loss of net profits for any fallow period required by a Response Plan.</p> <p>Net profit is to be standardised based on regional gross margins calculations for the Crop in question by State/Territory departments of agriculture.</p>	<p>Assessment of the gross margin to occur on an individual Owner by Owner basis using auditable records and applying best practice and industry average costs where necessary (i.e. where no records for some or all elements exist).</p>	<ul style="list-style-type: none"> <li>● If a period of fallow is not required by the Response Plan, E does not apply to ORC.</li> <li>● Loss of net profits across the specific species under the period of fallow need to be assessed based on average annual net profit of the fallowed species.</li> <li>● Time lags of production in cases of mother stock destruction (including reinstatement of mother stock after fallow and the growing to harvestable size for propagule sourcing/planting) as well as time requirements for importation and quarantine of new stock if it is required should be taken into consideration.</li> <li>● The value of the current stock on site that is destroyed (element “A”) would form part of the loss of net profits for the fallow period and therefore should be taken into consideration in the calculation of element “E”. “A” may therefore need to be subtracted from “E” to avoid double counting.</li> <li>● The primary goal should be to reduce the costs of the Response to all Parties including the Affected Parties. There needs to be a mechanism to enable people to remain productive when there is an incursion. An alternative Crop could be considered by growers, as the first option to enable them to remain productive. Where the response allows, suitable alternative crops will be identified from business records for previous crops produced.</li> <li>● Forward order contracts should be considered against the potential return of a substitute crop used to replace the destroyed Crop.</li> </ul>

	<b>Definition of Elements from the EPPRD</b>	<b>Evidence requirements (in hierarchical order)</b>	<b>Additional Information</b>
<b>F</b>	= Tree destruction costs 'depreciated' depending on the age of the orchard in relation to a standardised period of rotation for the tree Crop in question.	This element is considered not applicable for the nursery production industry.	<ul style="list-style-type: none"> <li>• The tree is the Crop (i.e. the tree is the harvestable commodity). Therefore, any additional cost associated with destroying the tree as opposed to harvesting the tree, would be captured in "C".</li> <li>• Normally, destruction will be carried out by the Lead Agency and not included as part of the ORC calculation.</li> </ul>
<b>G</b>	= 'Depreciated' tree replanting costs as for tree destruction costs.	This element is considered not applicable for the nursery production industry.	<ul style="list-style-type: none"> <li>• The tree is the Crop (i.e. the tree is the harvestable commodity). Reimbursing for "tree replanting costs" would result in an Owner essentially being reimbursed twice for the same element.</li> </ul>
<b>H</b>	= 'Depreciated' loss of profit during the non-bearing period of immature trees.	<p>The duration to maturity and comparative gross margin will be used to determine this loss.</p> <p>Assessment of the duration to maturity and gross margin to be assessed on an individual Owner by Owner basis using auditable records and applying best practice and industry average costs where necessary (i.e. where no records for some or all elements exist).</p>	<ul style="list-style-type: none"> <li>• Duration to maturity is considered the lag time from planting propagation material (container or inground) to when the plant may actually be sold.</li> </ul>
<b>I</b>	<p>= Value of any stored produce on farm destroyed as a directive of the Response Plan including seed or nuts — as for annual broadacre Crops.</p> <p>If there is an opportunity following the Response Plan for modernising or upgrading the orchard — for example, closer tree plantings, more expensive varieties, or trellis plantings, the level of Owner Reimbursement Costs is to be related strictly to replacing the asset that was there. If an Owner wants to introduce more technology or better infrastructure, for example, the Owner must cover any additional costs.</p>	<p>This will depend on what the Response Plan requires and will be calculated on an Incident by Incident basis.</p> <p>Price and yield to be determined using the applicable method as described in 'A'. Amount of any stored product will be determined by inspection at the time of the Incident.</p>	<ul style="list-style-type: none"> <li>• Stored product might include vegetative cuttings, budwood, bulbs, seeds, corms and rhizomes, etc for future production.</li> <li>• Loss of breeding stock in a research/breeding program (this includes mother stock) is included in "C", not here.</li> </ul>