

How the Plant Variety Rights (PVR) cost model and proposed fees were developed

INTRODUCTION

This document explains how officials developed the PVR cost model and proposed fees, and should be read in conjunction with the [Review of Plant Variety Rights Fees Discussion Document](#).

Like most fees for government services, PVR fees are based on the policy principle of full cost recovery. For the PVR scheme this means \$1.394 million needs to be recovered from users. However, officials recognise that full cost recovery would have a substantial impact on the industry and that the PVR scheme has an element of public good (see point 5 below). A review of PVR fees is urgently needed, as current revenue from fees is approximately \$400,000, which does not cover salary costs.

COST MODEL AND PROPOSED FEES

1. The Intellectual Property Office of New Zealand (IPONZ) determined the costs of providing a functional and efficient PVR scheme based on the current services provided by the PVR Office. The PVR Office costs are categorised into direct costs (e.g., personnel, contracts for outsourced growing trials and variety collections) and indirect costs (e.g., Ministry of Business, Innovation and Employment (MBIE) overheads, management). The total sum of costs to operate the PVR Office is \$1.394 million per year. This is considered the cost of a minimum viable scheme, where no new ongoing expenditure that would be recovered from third party fees has been planned.¹
2. The direct costs were divided into the fee categories – application, annual grant confirmation, examination and test trials. The test trials were grouped into types of plant species based on like categories, and personnel time was allocated across all of these in relation to personal related costs.

	TOTAL	Foreign test reports/ direct charging	Allocation of Direct Costs							
			Application	Annual grant confirmation	Examination	Test Trials				
			All varieties	All varieties	All varieties	Agriculture and vegetable crops	Fruit and nuts	Ornamentals, trees, and other plants	Pasture plants and amenity grasses	Fungi and grass endophytes
FTEs	6		0.8	0.1	1.8	0.5	0.2	0.2	0.3	0.1
Volumes	1,532		142	1,277	41	20	10	20	18	4
Volume %			9%	83%	3%	1%	0.7%	1.3%	1.2%	0.3%
Allocation factor - total FTEs			14%	1%	32%	8%	4%	3%	5%	2%

¹The operating cost of the Māori Plant Varieties Committee will be covered by reprioritised Crown funding.



3. Based on this cost model, the different types of costs can be spread across the different fee categories (Note: foreign test reports were not allocated due to the proposal that the cost of these be recovered directly from the applicant, with no markup). In addition to personnel, costs for examinations and test trials each include the cost of outsourced trials and travel. The test trials costs were based on external contracts, which have not been detailed, due to commercial sensitivity.

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Allocation factor - total FTEs			14%	1%	32%	8%	4%	3%	5%	2%
Personnel	571,999	-	69,141	7,593	159,956	33,104	19,606	14,890	21,118	7,991
Outsourced growing trials	357,650	6,000	-	-	1,500	142,175	6,525	13,050	180,000	8,400
Variety collections	97,600	-	-	97,600	-	-	-	-	-	-
Māori Plant Varieties Committee	20,000	-	-	-	-	-	-	-	-	-
Travel	58,600	-	-	-	5,000	-	-	-	-	-
Office expenses	1,950	-	-	-	-	-	-	-	-	-
MBIE overheads	286,156	-	-	-	-	-	-	-	-	-
	1,393,955	6,000	69,141	105,193	161,456	180,279	26,131	27,940	201,118	16,391

4. Indirect costs were also categorised by the time spent by personnel on those activities (refer to percentages highlighted in blue below). However, the total costs of these indirect activities then needed to be allocated to fee bearing activities. For example, international travel supporting International Union for the Protection of New Varieties of Plants (UPOV) meetings was allocated to the annual grant confirmation fee. In determining how these indirect costs were allocated, consideration was given to avoid creating a barrier to entry into the scheme. For example, allocating 100 per cent of the management and support costs to the annual grant fee. The bottom row of the table below shows the total cost of the scheme (\$1.394 million) has been apportioned across activities that can be recovered through a fee. These costs can then be divided to determine the unit cost.

	TOTAL	Foreign test reports/ direct charging	Allocation of Direct Costs								Allocation of Indirect or Fixed Costs			
			Application	Annual grant confirmation	Examination	Test Trials					Awareness, Engagement, International	Technical	Māori plant varieties committee	Management & support
			All varieties	All varieties	All varieties	Agriculture and vegetable crops	Fruit and nuts	Ornamentals, trees, and other plants	Pasture plants and amenity grasses	Fungi and grass endophytes	All varieties			
FTEs	6		0.8	0.1	1.8	0.5	0.2	0.2	0.3	0.1	0.9	0.3	0.01	0.6
Volumes	1,532		142	1,277	41	20	10	20	18	4				
Volume %			9%	83%	3%	1%	0.7%	1.3%	1.2%	0.3%				
Allocation factor - total FTEs			14%	1%	32%	8%	4%	3%	5%	2%	15%	6%	0%	11%
Personnel	571,999	-	69,141	7,593	159,956	33,104	19,606	14,890	21,118	7,991	104,338	39,384	-	94,879
Outsourced growing trials	357,650	6,000	-	-	1,500	142,175	6,525	13,050	180,000	8,400	-	-	-	-
Variety collections	97,600	-	-	97,600	-	-	-	-	-	-	-	-	-	-
Māori Plant Varieties Committee	20,000	-	-	-	-	-	-	-	-	-	-	-	20,000	-
Travel	58,600	-	-	-	-	5,000	-	-	-	-	46,000	-	-	7,600
Office expenses	1,950	-	-	-	-	-	-	-	-	-	-	-	-	1,950
MBIE overheads	286,156	-	-	-	-	-	-	-	-	-	-	-	-	286,156
	1,393,955	6,000	69,141	105,193	161,456	180,279	26,131	27,940	201,118	16,391	150,338	39,384	20,000	390,585
Reallocate international	-	-	-	150,338	-	-	-	-	-	-	-150,338	-	-	-
Reallocate māori plant varieties committee	-	-	20,000	19,692	-	-	-	-	-	-	-	-39,384	-20,000	-
Reallocate technical decisions	-	-	19,692	19,692	-	-	-	-	-	-	-	-	-	-
Reallocate management/overhead	-	-	-	390,585	-	-	-	-	-	-	-	-	-	-390,585
	1,393,955	6,000	108,833	665,807	161,456	180,279	26,131	27,940	201,118	16,391	-	-	-	-

- Officials recognised that full cost recovery would have a substantial impact on the industry and that the PVR scheme has an element of public good. Accordingly, Cabinet agreed to interim Crown funding of \$2 million over a four-year period in order to implement a partial cost recovery scheme for that time period. This funding has been allocated across the fee bearing activities, reducing the amount the cost being recovered by the fee (i.e. decreasing the unit of cost recovery). The allocation of the Crown funding was based on the proposed level of public good attributable to that activity. For example, the cost of the Māori Plant Varieties Committee, the variety collections, and international travel to attend UPOV have been fully covered by Crown funding in the proposed model. The remainder was apportioned across the examination and test trial categories.
- In the coming year, an economic analysis will be undertaken to determine the level of public good of the regime. This analysis will inform the next review of fees, which will be completed within the next three years, and will enable Cabinet to determine a longer-term approach to the administration of fees, level of public good, and degree of continued Crown investment for this scheme.

	TOTAL	Foreign test reports/ direct charging	Allocation of Direct Costs								Allocation of Indirect or Fixed Costs			
			Application	Annual grant confirmation	Examination	Test Trials					Awareness, Engagement, International	Technical	Māori plant varieties committee	Management & support
			All varieties	All varieties	All varieties	Agriculture and vegetable crops	Fruit and nuts	Ornamentals, trees, and other plants	Pasture plants and amenity grasses	Fungi and grass endophytes	All varieties			
FTEs	6		0.8	0.1	1.8	0.5	0.2	0.2	0.3	0.1	0.9	0.3	0.01	0.6
Volumes	1,532		142	1,277	41	20	10	20	18	4				
Volume %			9%	83%	3%	1%	0.7%	1.3%	1.2%	0.3%				
Allocation factor - total FTEs			14%	1%	32%	8%	4%	3%	5%	2%	15%	6%	0%	11%
Personnel	571,999	-	69,141	7,593	159,956	33,104	19,606	14,890	21,118	7,991	104,338	39,384	-	94,879
Outsourced growing trials	357,650	6,000	-	-	1,500	142,175	6,525	13,050	180,000	8,400	-	-	-	-
Variety collections	97,600	-	-	97,600	-	-	-	-	-	-	-	-	-	-
Māori Plant Varieties Committee	20,000	-	-	-	-	-	-	-	-	-	-	-	20,000	-
Travel	58,600	-	-	-	-	5,000	-	-	-	-	46,000	-	-	7,600
Office expenses	1,950	-	-	-	-	-	-	-	-	-	-	-	-	1,950
MBIE overheads	286,156	-	-	-	-	-	-	-	-	-	-	-	-	286,156
	1,393,955	6,000	69,141	105,193	161,456	180,279	26,131	27,940	201,118	16,391	150,338	39,384	20,000	390,585
Reallocate international	-	-	-	150,338	-	-	-	-	-	-	-150,338	-	-	-
Reallocate māori plant varieties committee	-	-	20,000	-	-	-	-	-	-	-	-	-39,384	-20,000	-
Reallocate technical decisions	-	-	19,692	19,692	-	-	-	-	-	-	-	-	-	-
Reallocate management/overhead	-	-	-	390,585	-	-	-	-	-	-	-	-	-	-390,585
	1,393,955	6,000	108,833	665,807	161,456	180,279	26,131	27,940	201,118	16,391	-	-	-	-
<i>Māori advisory</i>	-20,000		-20,000											
<i>Support on examination</i>	-130,000			-130,000										
<i>Support on application</i>	0													
<i>Support on growing trials</i>	-232,400					-108,000	-13,500	-15,250	-87,650	-8,000				
<i>International travel UPOV</i>	-20,000			-20,000										
<i>Variety collections</i>	-97,600			-97,600										
<i>Total crown funding</i>	-500,000		-20,000	-117,600	-130,000	-108,000	-13,500	-15,250	-87,650	-8,000				
	1,893,955	6,000	88,833	548,207	31,456	72,279	12,631	12,690	113,468	8,391	-	-	-	-

- Following these calculations, the unit cost for each fee type was calculated by dividing the final cost by total volumes of applications in each category. These figures (with rounding applied) are the proposed fees set out in the discussion document.

	Application	Annual grant confirmation	Examinations
UNIT COST - Cost/ volumes	\$625.58	\$429.14	\$767.21
Proposed fee	\$625	\$430	\$770

8. The test trial categories are broken down into further categories, so their unit costs are outlined below. There were a number of criteria used for the testing and evaluation breakdown. This includes (1) plant species, (2) testing requirements, (3) examiners time, (4) number of varieties, (5) Crown funding input, and (6) special factors /variety collection.

TEST TRIALS	COST						Unit Cost				
	Volumes	Agriculture and vegetable crops	Fruit and nuts	Ornamentals, trees, and other plants	Pasture plants and amenity grasses	Fungi and grass endophytes	Agriculture and vegetable crops	Fruit and nuts	Ornamentals, trees, and other plants	Pasture plants and amenity grasses	Fungi and grass endophytes
Agriculture and vegetable crops											
- seed propagated varieties (cereals, peas, forage)	12	50,510					\$4,209				
- vegetatively propagated varieties (potatoes, hops)	9	21,770					\$2,419				
Fruit and nut											
- strawberry varieties	3		371					\$124			
- all other varieties- year 1	5		10,647					\$2,129			
- all other varieties- year 2	2		1,613					\$807			
Ornamentals											
- roses	11			1,147					\$104		
- all other varieties- year 1	7			10,146					\$1,449		
- all other varieties- year 2	2			1,397					\$699		
Grasses, white clover	18				113,468					\$6,304	
grass endophytes, fungi	3					8,391					\$2,797
Total cost	72	72,279	12,631	12,690	113,468	8,391					
							219,460				