

1. Australia's report, under paragraph 1 and 2 of Decision Ex.I/4, on available information on alternatives.

Critical use exemption: Rice (consumer packs) – Post harvest	
<i>Alternatives available</i>	<i>Possible date of registration, if required</i>
Carbon disulphide	Only registered as a vertebrate (pig) poison
Carbon dioxide	Rodenticide only
Ethyl formate (alone as liquid and in combination - eg <i>Vapormate</i>)	Liquid application for eradication of insect pests in packaged dry fruits only Vapormate – Cereal grains and oilseeds in sealed storage (with moisture content $\leq 12\%$) only (ie <u>loose grain</u> in sealed silos) and Grain storage premises and equipment for all life stages of various stored product pests, except the rice weevil where only the eggs, larvae and adult are specified.
Phosphine (alone and in combination - eg <i>Eco2fume</i>)	
Heat treatment	
Inert dust / diatomaceous earth	
Irradiation	
Pesticides of low volatility (organophosphates, pyrethroids, insect growth regulators, botanicals) Dichlorvos Pyrethrin/piperonyl butoxide (eg <i>Drift</i>)	
Sulfuryl fluoride (ProFume)	Some ambiguity remains as to the label coverage for packaged rice within a storage shed, which the manufacturer has not sought to resolve.
Steam treatment	
Vacuum treatment / hermetic storage	

Critical use exemption: Strawberry runners – Pre plant soil fumigation

<i>Alternatives available</i>	<i>Possible date of registration, if required</i>
PicPlus®	Not yet technically feasible because it needs development of complementary treatments (herbicide, spade injected metam sodium) to improve pathogen control and runner yields. Not approved for use by runner certification authorities.
1,3-D/Pic products	New research is examining 1,3-D/Pic formulations with lower rates of 1,3-D (e.g. TF-80®) with the aim of reducing the phytotoxicity of this alternative. TF-80® is not registered for use in Australia, but strawberry runner industry research is supporting its registration.
Methyl iodide	No registered products containing MI available in Australia. Manufacturer has indicated that they do not intend to pursue Australian registration of MI.
Ethanedinitrile	Manufacturer ceased funding for research on use on strawberry runners in 2012. Not registered and not available to Victorian runner growers.
Propylene oxide	No. Approved as an active constituent only with no registered products available in Australia.
Recaptured MB from QPS applications	Not feasible as there is no commitment from a fumigator to improve the consistency of formulation to support registration. Not registered and not available to runner growers.
Lower rates of MB (20g MB/m ²)	Three years of trialling have not demonstrated bioequivalence between lower and standard (25 g MB/m ²) rates. This research does not allow registration applications for lower rates to proceed.
Soil-less substrates	It needs to be approved for use by runner certification authorities.