

Australian Government

Department of Agriculture, Water and the Environment

# Policy for managing high risk goods of hosting khapra beetle (*Trogoderma granarium*) through the international traveller and international mail pathways.

This document sets out the department's policy for managing goods that pose a high risk of hosting khapra beetle (*Trogoderma granarium*) arriving in Australia with an international traveller with their baggage and as international mail. These goods are specified at **Attachment A**. This policy provides guidance for biosecurity officers in exercising powers under the *Biosecurity Act 2015* (Act) Chapter 3, in particular:

- Assessment powers under Division 4, Part 1, Chapter 3 of the Act, for example, inspecting goods and taking samples (s 125), requiring documents relating to goods to be produced (s 127)
- Management powers under Division 5, Part 1, Chapter 3 of the Act, for example, destruction of goods (s 136).

<u>Khapra beetle</u> (*Trogoderma granarium*) has previously been detected in imported goods, however the rate of detections in Australia over the last 18 months has increased significantly. Similarly, increased rates of interceptions have also been recorded by United States authorities, which resulted in enhanced phytosanitary regulation for several commodities. A risk assessment has been conducted (see below) which concluded that the level of biosecurity risk has increased to an unacceptable level.

The genus *Trogoderma* spp. includes more than 150 species and contains some of the world's most serious pests of stored grains and other foodstuffs. All known species, except for *Trogoderma variabile*, are absent from Australia and considered to be pests of quarantine concern. Khapra beetle (*Trogoderma granarium*) is significant pest for Australia being recognised as number two on Australia's National Plant Priority Pest List (2019).

Khapra beetle infests a variety of hosts including seeds, grains and plant-based foodstuffs. It is also known to be an effective hitchhiker on goods that are not of biosecurity concern (such as packing materials) and through contaminated shipping containers. Khapra beetle is being detected with increasing frequency from countries where this pest is known to be present as well as from countries that claim to be free of khapra beetle.

Khapra beetle is a pest that poses biosecurity risk within the meaning of s 9 of the Biosecurity Act. This is because it is an animal that has the potential to cause, either directly or indirectly, harm to human, animal or plant health or the environment. This is because the entry, establishment and spread of khapra beetle in Australia would have unacceptable economic consequences, both direct and indirect, for Australia's agricultural and food production sectors. Maintaining Australia's freedom from this pest underpins several international trade relationships and market access for grain exports, that is permitted without strict sanctions imposed or costly treatment requirements.

#### **Risk assessment**

In August 2020, the department conducted a risk assessment—Risk assessment to manage the threat to Australia's biosecurity from khapra beetle *(Trogoderma granarium)* and other Trogoderma species of plant-based stored products—that identified that enhanced biosecurity measures are

required to reduce the level of biosecurity risk with a range of goods and to appropriately manage the risk of entry, establishment and spread of khapra beetle in Australia. This includes:

- Non-commercial consignments (as unaccompanied personal effects (UPEs)), low value air and sea freight through the self-assessed clearance system (SAC) (excluding commercial trade samples and research material), mail and accompanied baggage) of high-risk commodities (Attachment A) pose an unacceptable level of biosecurity risk.
- Extending phytosanitary certification verifying freedom from *Trogoderma* species to all high-risk plant products imported via commercial pathways from all countries this will require importers to provide certification given by government officials of the exporting country that consignments are free all Trogoderma species, including *T. granarium* (khapra beetle). This is due to difficulties in accurate identification of *Trogoderma* species based on morphological characteristics.
- Introducing mandatory offshore treatment of high-risk plant products imported via commercial pathways from target risk countries determined to pose an unacceptable khapra beetle risk (these measures will not apply to seeds for planting).

#### Managing goods that pose an unacceptable level of biosecurity risk

All goods that have been identified in the risk assessment as posing a high risk of hosting khapra beetle, arriving in Australia with international travellers with their baggage or in international mail are to be destroyed under Chapter 3 - Section 136 of the *Biosecurity Act 2015*. Preventing the entry of high-risk goods and commodities through non-commercial consignments is justified because:

- khapra beetle and other *Trogoderma* species associated with plant-based stored products are physically small, and are of a cryptic nature, so that detection may be challenging.
- goods on these pathways may not have been subject to commercial quality control processes to manage storage pests such as Khapra beetle.
- goods entering via these pathways can be difficult to detect, and as a result may bypass normal phytosanitary controls.
- volumes of non-commercial consignments is very high; for example, during 2017 to 2018 approximately 41 million air cargo consignments, 152 million international mail articles and 21 million passengers arrived in Australia. Therefore, there are significant challenges for the department in inspecting/intercepting high-risk materials entering via these import pathways.
- khapra beetle is intercepted in such goods and commodities by various countries including Australia and the USA. Based on repeated interceptions of Khapra beetle, imports of non--commercial quantities of agricultural commodities from some countries have been prohibited. For example, in 2012, USA prohibited the non-commercial importation of rice, soybeans, chickpeas, and safflower seeds from countries known to have Khapra beetle.

The application of this measure will reduce the entry of pest species of *Trogoderma* through this pathway, and thus meet Australia's ALOP (appropriate level of protection).

Table 1 (International traveller pathway), Table 2 (International Mail pathway) and Table 3 (International travellers arriving via non-commercial vessels or as a crew member leaving a commercial international maritime vessel) below, reflects the differing level of biosecurity risks

associated with various risk factors and biosecurity risk management measures (using Chapter 3 assessment and management powers).

The management actions will be conveyed to biosecurity officers as decision support in the onshore outcomes section of impacted BICON commodity cases. This is only intended to provide policy guidance to biosecurity officers in their exercise of Chapter 3 powers. Each biosecurity officer should continue to exercise their discretion in decision-making under Chapter 3, including undertaking an assessment of the biosecurity risks for each consignment of goods, having regard to the relevant circumstances.

Table 1. Management of biosecurity risks and compliance actions on goods from all countries that pose a high risk of hosting khapra beetle (Attachment A), imported by an international traveller through their baggage.

Detecting the biosecurity risk	Biosecurity risk	Managing the biosecurity risk of the goods onshore
Document Assessment/Inspection and Screening Outcomes		
Incoming passenger card (IPC) or crew declaration form (CDF) (s 196) has been presented with a declaration that goods posing a high risk of hosting khapra beetle may be within their baggage.	• Goods posing a high risk of contamination or infestation with khapra beetle have the potential to introduce, establish and spread this pest into Australia, that could cause harm to human health, plant health and have serious economic consequences.	<ul> <li>Biosecurity officers may exercise 'biosecurity risk assessment powers' (s 123-129) such as requiring documents, asking questions, or inspecting the goods to assess the biosecurity risk associated with the relevant goods</li> <li>Biosecurity officers may choose to exercise the</li> </ul>
Or	• The department has conducted a risk assessment, <i>Risk assessment to manage the threat to Australia's biosecurity from khapra beetle</i> (Trogoderma granarium) and other	biosecurity measure powers (s 131-136) if they suspect, on reasonable grounds that the biosecurity risk associated with the goods is unacceptable. This may be by considering the
A biosecurity officer asks the traveller questions (s 126(1)) relating to their baggage and the traveller confirms they are	Trogoderma species of plant-based stored products and determined that goods posing a high risk of hosting khapra beetle pose an unacceptable level of biosecurity risk.	<ul> <li>information in the Department's risk assessment, as well as the result of the exercise of the biosecurity risk assessment powers</li> <li>Where a person brings or imports goods that</li> </ul>
carrying high risk goods And/or	<ul> <li>Goods imported as baggage have an unknown level of quality control and unknown origin, and a lack of pre-arrival notification making it difficult to target and intercept high risk goods.</li> </ul>	pose a high risk of introducing khapra beetle (Attachment A), it may be open to a biosecurity officer to suspect, on reasonable grounds, that the biosecurity risk associated with the goods is unacceptable. This will be relevant when
A traveller's baggage (mishandled and/or accompanied) is screened and inspected and found to contain goods posing a high risk of hosting khapra beetle.	<ul> <li>Khapra beetle, is a cryptic pest, being able to withstand extreme temperatures and undergo periods of diapause (hibernation) for extended periods (years) which has contributed to its global spread, and dispersed further through international</li> </ul>	<ul> <li>deciding whether to require a biosecurity measure under Chapter 3 powers.</li> <li>It is recommended that high-risk goods are either:</li> </ul>

Detecting the biosecurity risk	Biosecurity risk	Managing the biosecurity risk of the goods onshore
(excluding goods presented with a valid import permit.)	<ul> <li>movement of infested seed and plant products.</li> <li>Khapra beetle is known to be a difficult pest to treat and requires very high levels of methyl bromide treatment or lengthy periods of time exposed to heat. Treatment may not be effective, if the khapra larvae are in diapause, or if goods are packaged in a way to prevent effective exposure to the fumigant or heat treatment.</li> <li>The biology of khapra beetle, being a pest that is smaller than 3mm makes it a pest difficult to detect in contaminated food products, such as rice. This makes inspection on arrival an unreliable measure to manage the risk posed by khapra beetle.</li> <li>Khapra larvae are also difficult to detect in seeds, as the larvae may be located inside the seed (thus not visible, unless a destructive sampling process is undertaken).</li> </ul>	<ul> <li>voluntarily disposed of (note: this option is not available if non-compliance action is pending or if the baggage is mishandled) OR</li> <li>forfeited to the Commonwealth (Section 628) for destruction (Section 136). These actions are recommended as treatments (Section 133) are not considered to be effective in managing the biosecurity risk; and voluntary disposal (mishandled baggage only) and export of goods would require storage which may not be effective at managing the biosecurity risk.</li> <li>Fumigation may not be effective for managing consignment of high-risk goods as fumigants must be able to permeate the packaging of the products. Packaged goods, such as rice are often distributed for personal use in ready retail packaging, such as plastic sealed bags (non-permeable to gas). Opening the packages may increase the risk of spillage and may lead to insects escaping into the surrounding environment.</li> <li>Heat treatment may not be an effective treatment for personal consignments (prepackaged goods, bagged), as the temperature monitoring required within the product. Opening the packages may increase the risk of spillage and may lead to insects escaping into the surrounding environment.</li> </ul>

Detecting the biosecurity risk	Biosecurity risk	Managing the biosecurity risk of the goods onshore
		insects escaping into the surrounding environment.
		<ul> <li>Treatment of personal consignments will not be able to be performed at the site of inspection and would require movement to a department-approved treatment provider, though transportation is not always under biosecurity supervision. The transportation of high-risk products potentially infested with khapra is considered to present an unacceptable risk, due to potential for inadvertent spread of the pest beyond the original inspection location.</li> </ul>
		<ul> <li>Export of personal consignments in the traveller pathway requires goods to be stored prior to collection by the exiting traveller or by Australia Post. The storage of high-risk products potentially infested with khapra is considered to present an unacceptable risk, due to potential for inadvertent spread of the pest into the storage location.</li> </ul>
		<ul> <li>Voluntary disposal of goods that are detected in mishandled baggage requires the goods to be stored whilst the owner of the goods is contacted via the airline or vessel representative. The storage of high- risk products potentially infested with khapra is considered to present an unacceptable risk, due to potential for</li> </ul>

Detecting the biosecurity risk	Biosecurity risk	Managing the biosecurity risk of the goods onshore
Suspect khapra beetle (including adult beetles (dead/alive), larvae (dead/alive) and cast skins) are detected on screening and	<ul> <li>Goods posing a high risk of contamination or infestation with khapra beetle have the potential to introduce, establish and</li> </ul>	<ul> <li>inadvertent spread of the pest into the storage location.</li> <li>When directing for destruction importers are to be given the opportunity to provide submissions in relation to the decision.</li> <li>Biosecurity officers may exercise 'biosecurity risk assessment powers' (s 123-129) such as requiring documents, asking questions, or</li> </ul>
inspection.	<ul> <li>spread this pest into Australia, that could cause harm to human health, plant health and have serious economic consequences.</li> <li>The department has conducted a risk assessment, <i>Risk assessment to manage the threat to Australia's biosecurity from khapra beetle (Trogoderma granarium) and other Trogoderma species of plant-based stored products and determined that goods posing a high risk of hosting khapra beetle pose an unacceptable level of biosecurity risk.</i></li> <li>Suspect khapra beetle (including adult beetles (dead/alive), larvae (dead/alive) and cast skins intercepted in baggage are to be submitted to Operational Science and Surveillance for identification and data collection.</li> <li>Khapra beetle (all life stages) is difficult to identify and exotic <i>Trogoderma</i> spp. can only be positively confirmed by trained</li> </ul>	<ul> <li>inspecting the goods to assess the biosecurity risk associated with the relevant goods</li> <li>Biosecurity officers may choose to exercise the biosecurity measure powers (s 131-136) if they suspect, on reasonable grounds, that the biosecurity risk associated with the goods is unacceptable. This may be by considering the information in the Department's risk assessment, as well as the result of the exercise of the biosecurity risk assessment powers</li> <li>Where a suspect khapra beetle (including adult beetles (dead/alive), larvae (dead/alive) and cast skins insect) has been detected, and therefore an unacceptable biosecurity risk, it is recommended that goods are either:</li> <li>voluntarily disposed of by the traveller (note: this option is not available if noncompliance action is pending or if the baggage is mishandled) OR</li> </ul>

Detecting the biosecurity risk	Biosecurity risk	Managing the biosecurity risk of the goods onshore
	<ul> <li>entomologists, using both morphological characteristics (under a microscope) and confirmation through diagnostic</li> <li>Polymerase Chain Reaction (PCR) testing. Formal identification processes can take several days to complete.</li> <li>High risk goods (Attachment A) are inherently attractive to a variety of storage pests, including khapra beetle, as the product provides a nutritional food source.</li> <li>Stored seeds are vulnerable to pest attack because of their prolonged period of storage (often more than one year) and because seed varieties are stored in relatively small quantities in separate packages that usually exclude the possibility of active ventilation and of regular inspection and monitoring.</li> <li>Seeds are marketed and transported over long geographical distances which promotes repeated introductions of invasive stored seed pests and their global spread.</li> </ul>	<ul> <li>forfeited to the Commonwealth (Section 628) for destruction (Section 136).</li> <li>Goods should be securely packaged to manage the infestation risk prior to destruction. Additional considerations may be required if suspect khapra beetle infestation occurs throughout the traveller's luggage. In such cases, biosecurity officers must seek advice from Operational Science and Surveillance and/or their supervisor.</li> <li>Fumigation may not be effective for managing personal consignments of highrisk goods as fumigants must be able to permeate the packaging of the products. Packaged goods, such as rice, are often distributed for personal use in ready retail packaging, such as plastic sealed bags (non-permeable to gas). Opening the packages may also increase the risk of spillage and may lead to insects escaping into the surrounding environment.</li> <li>Heat treatment may not be an effective treatment for personal consignments (pre-packaged goods, bagged), as the temperature monitoring required within the product. Opening the packages may also increase the risk of spillage and may lead to insects escaping into the surrounding environment.</li> </ul>

Detecting the biosecurity risk	Biosecurity risk	Managing the biosecurity risk of the goods onshore
		lead to insects escaping into the surrounding environment.
		<ul> <li>Treatment of personal consignments will not be able to be performed at the site of inspection and would require movement to a department approved treatment provider, though transportation is not always under biosecurity supervision. The transportation of high-risk products potentially infested with khapra is considered to present an unacceptable risk, due to potential for inadvertent spread of the pest beyond the original inspection location.</li> </ul>
		<ul> <li>Export of personal consignments in the traveller pathway requires goods to be stored prior to collection by the exiting traveller. The storage of high-risk products potentially infested with khapra is considered to present an unacceptable risk, due to potential for inadvertent spread of the pest into the storage location.</li> </ul>
		<ul> <li>Voluntary disposal of goods that are detected in mishandled baggage requires the goods to be stored whilst the owner of the goods is contacted via the airline or vessel representative. The storage of high-risk products potentially infested with khapra is considered to present an unacceptable risk, due to potential for</li> </ul>

Detecting the biosecurity risk	Biosecurity risk	Managing the biosecurity risk of the goods onshore
		inadvertent spread of the pest into the storage location
		<ul> <li>When directing for destruction importers are to be given the opportunity to provide submissions in relation to the decision.</li> </ul>

Table 2. Management of biosecurity risks and compliance actions on goods from all countries that pose a high risk of hosting khapra beetle (Attachment A), imported through international mail.

tcomes	
ods posing a high risk of contamination or estation with khapra beetle have the tential to introduce, establish and spread is pest into Australia, that could cause harm human health, plant health and have serious onomic consequences. e department has conducted a risk essment, <i>Risk assessment to manage the</i> <i>eat to Australia's biosecurity from khapra</i> <i>etle</i> (Trogoderma granarium) <i>and other</i> <i>ogoderma species of plant-based stored</i> <i>oducts</i> and determined that goods posing a h risk of hosting khapra beetle pose an acceptable level of biosecurity risk. Goods imported via international mail often have limited information regarding manufacturing processes and origin. Additionally, a lack of pre-arrival information makes it difficult to target and intercept high risk goods. Khapra beetle, is a cryptic pest, being able to withstand extreme temperatures and undergo periods of dianause (hibernation)	<ul> <li>Biosecurity officers may exercise 'biosecurity risk assessment powers' (s 123-129) such as requiring documents, asking questions, or inspecting the goods to assess the biosecurity risk associated with the relevant goods.</li> <li>Biosecurity officers may choose to exercise the biosecurity measure powers (s 131-136) if they suspect, on reasonable grounds that the biosecurity risk associated with the goods is unacceptable. This may be by considering the information in the department's risk assessment, as well as the result of the exercise of the biosecurity risk assessment powers</li> <li>Where a person imports goods via international mail that pose a high risk of introducing khapra beetle (Attachment A), it may be open to a biosecurity officer to suspect, on reasonable grounds, that the biosecurity risk associated with the goods is unacceptable. This will be relevant when deciding whether to require a biosecurity measure under Chapter 3 powers.</li> <li>It is recommended that high risk goods are destroyed (Section 136) because treatments (Section 133) are not considered to be effective</li> </ul>
	s pest into Australia, that could cause harm numan health, plant health and have serious nomic consequences. e department has conducted a risk essment, <i>Risk assessment to manage the</i> <i>eat to Australia's biosecurity from khapra</i> <i>etle</i> (Trogoderma granarium) <i>and other</i> <i>goderma species of plant-based stored</i> <i>ducts</i> and determined that goods posing a h risk of hosting khapra beetle pose an acceptable level of biosecurity risk. Goods imported via international mail often have limited information regarding manufacturing processes and origin. Additionally, a lack of pre-arrival information makes it difficult to target and intercept high risk goods. Khapra beetle, is a cryptic pest, being able

Detecting the biosecurity risk	Biosecurity risk	Managing the biosecurity risk of the goods onshore
	<ul> <li>dispersed further through international movement of infested seed and plant products.</li> <li>Khapra beetle is known to be a difficult pest to treat and requires very high levels of methyl bromide treatment or lengthy periods of time exposed to heat. Treatment may not be effective, if the khapra larvae are in diapause, or if goods are packaged in a way to prevent effective exposure to the fumigant or heat treatment.</li> <li>The biology of khapra beetle, being a pest that is smaller than 3mm, makes it a pest difficult to detect in contaminated food products, such as rice. This makes biosecurity inspection on arrival an unreliable measure to manage the risk posed by khapra beetle.</li> <li>Khapra larvae are also difficult to detect in seeds, as the larvae may be located inside the seed (thus not visible, unless a destructive sampling process is undertaken).</li> </ul>	<ul> <li>Australia Post which may not be effective at managing the biosecurity risk.</li> <li>Fumigation may not be effective for managing consignments of high-risk goods as fumigants must be able to permeate the packaging of the products. Packaged goods, such as rice are often distributed for personal use in ready retail packaging, such as plastic sealed bags (non-permeable to gas). Opening the packages may increase the risk of spillage and may lead to insects escaping into the surrounding environment.</li> <li>Heat treatment may not be an effective treatment for mail articles (which generally contain pre-packaged goods), as the temperature monitoring required within the product. Opening the goods may increase the risk of spillage and may lead to insects escaping into the surrounding environment.</li> <li>Appropriate treatment of goods arriving via international mail is not able to be performed at the site of inspection and instead requires movement to a department-approved treatment provider, through transportation. The transportation of high-risk goods potentially infested with khapra is considered to present an unacceptable risk, due to potential for</li> </ul>

Detecting the biosecurity risk	Biosecurity risk	Managing the biosecurity risk of the goods onshore
		<ul> <li>inadvertent spread of the pest beyond the original inspection location.</li> <li>Export of mail articles in the mail pathway requires collection and subsequent management by Australia Post, and may require storage by Australia Post outside of the designated biosecurity control release area, prior to export. Once transferred to Australia Post, the mail article is no longer traceable by the department. The management and storage of high-risk products potentially infested by khapra beetle by Australia Post staff, who do not have biosecurity training, is considered to present an unacceptable risk due to potential for inadvertent spread of the pest.</li> </ul>
Suspect khapra beetle (including adult beetles (dead/alive), larvae (dead/alive) and cast skins) are detected on screening and inspection.	<ul> <li>Goods posing a high risk of contamination or infestation with khapra beetle have the potential to introduce, establish and spread this pest into Australia, that could cause harm to human health, plant health and have serious economic consequences.</li> <li>The department has conducted a risk assessment, <i>Risk assessment to manage the threat to Australia's biosecurity from khapra beetle (Trogoderma granarium) and other Trogoderma species of plant-based stored products</i> and determined that goods posing a high risk of hosting khapra beetle pose an unacceptable level of biosecurity risk.</li> </ul>	<ul> <li>Biosecurity officers may exercise 'biosecurity risk assessment powers' (s 123-129) such as requiring documents, asking questions, or inspecting the goods to assess the biosecurity risk associated with the relevant goods</li> <li>Biosecurity officers may choose to exercise the biosecurity measure powers (s 131-136) if they suspect, on reasonable grounds, that the biosecurity risk associated with the goods is unacceptable. This may be by considering the information in the Department's risk assessment, as well as the result of the exercise of the biosecurity risk assessment powers</li> </ul>

Detecting the biosecurity risk	Biosecurity risk	Managing the biosecurity risk of the goods onshore
	<ul> <li>Suspect khapra beetle (including adult beetles (dead/alive), larvae (dead/alive) and cast skins intercepted in baggage are to be submitted to Operational Science and Surveillance for identification and data collection.</li> <li>Khapra beetle (all life stages) is difficult to identify and exotic <i>Trogoderma</i> spp. can only be positively confirmed by trained entomologists, using both morphological characteristics (under a microscope) and confirmation through diagnostic Polymerase Chain Reaction (PCR) testing. Formal identification processes can take several days to complete.</li> <li>High risk goods (Attachment A) are inherently attractive to a variety of storage pests, including khapra beetle, as the product provides a nutritional food source.</li> <li>Stored seeds are vulnerable to pest attack because of their prolonged period of storage (often more than one year) and because seed varieties are stored in relatively small quantities in separate packages that usually exclude the possibility of active ventilation and of regular inspection and monitoring.</li> <li>Seeds are marketed and transported over long geographical distances which promotes</li> </ul>	<ul> <li>Where a suspect khapra beetle (including adult beetles (dead/alive), larvae (dead/alive) and cast skins) has been detected, and therefore an unacceptable biosecurity risk, it is recommended that goods are destroyed (Section 136). Goods should be securely packaged to manage the infestation risk prior to destruction. Additional considerations may be required if suspect khapra beetle infestation occurs throughout the whole mail article. This may include destruction of the whole mail article.</li> <li>Fumigation may not be effective for managing personal consignments of highrisk goods as fumigants must be able to permeate the packaging of the products. Packaged goods, such as rice, are often distributed for personal use in ready retail packaging, such as plastic sealed bags (nonpermeable to gas). Opening the packages may also increase the risk of spillage and may lead to insects escaping into the surrounding environment.</li> <li>Heat treatment may not be an effective treatment for personal consignments (prepackaged goods, bagged), as the temperature monitoring required within the product. Opening the packages may also increase the risk of spillage and may lead to rease the risk of spillage and may lead to heat the integrity of the product. Opening the packages may also increase the risk of spillage and may lead to rease the risk of spillage and may lead to monitoring required within the product. Opening the packages may also increase the risk of spillage and may lead to may not be an effective the product. Opening the packages may also increase the risk of spillage and may lead to spillage and may lea</li></ul>

Detecting the biosecurity risk	Biosecurity risk	Managing the biosecurity risk of the goods onshore
	repeated introductions of invasive stored seed pests and their global spread.	insects escaping into the surrounding environment.
		<ul> <li>Treatment of personal consignments will not be able to be performed at the site of inspection and would require movement to a department approved treatment provider, though transportation is not always under biosecurity supervision. The transportation of high-risk products potentially infested with khapra is considered to present an unacceptable risk, due to potential for inadvertent spread of the pest beyond the original inspection location.</li> </ul>
		• Export of mail articles in the mail pathway requires collection and subsequent management by Australia Post, and may require storage by Australia Post outside of the designated biosecurity control release area, prior to export. Once transferred to Australia Post, the mail article is no longer traceable by the department. The management and storage of high-risk products potentially infested by khapra beetle by Australia Post staff, who do not have biosecurity training, is considered to present an unacceptable risk due to potential for inadvertent spread of the pest

Table 3. Management of biosecurity risks and compliance actions on goods from all countries that pose a high-risk of hosting khapra beetle (Attachment A), imported via international travellers arriving via non-commercial vessels or as a crew member leaving a commercial international maritime vessel.

Detecting the biosecurity risk	Biosecurity risk	Managing the biosecurity risk of the goods onshore
Document Assessment/Inspection	and Screening Outcomes	
A crew declaration form (CDF) (s 196) or other notification has been presented with a declaration that the traveller/crew member may be carrying goods posing a high risk of hosting khapra beetle.	<ul> <li>Goods posing a high risk of contamination or infestation with khapra beetle have the potential to introduce, establish and spread this pest into Australia, that could cause harm to human health, plant health and have serious economic consequences.</li> </ul>	<ul> <li>Biosecurity officers may exercise 'biosecurity risk assessment powers' (s 123-129) such as requiring documents, asking questions, or inspecting the goods to assess the biosecurity risk associated with the relevant goods</li> <li>Biosecurity officers may choose to exercise the</li> </ul>
Or A biosecurity officer asks the traveller/crew member questions (s 126(1)) relating to	• The department has conducted a risk assessment, <i>Risk assessment to manage the</i> <i>threat to Australia's biosecurity from khapra</i> <i>beetle</i> (Trogoderma granarium) and other <i>Trogoderma species of plant-based stored</i> <i>products</i> and determined that goods posing a high risk of hosting khapra beetle pose an	biosecurity measure powers (s 131-136) if they suspect, on reasonable grounds that the biosecurity risk associated with the goods is unacceptable. This may be by considering the information in the Department's risk assessment, as well as the result of the exercise of the biosecurity risk assessment powers
their goods and the traveller/crew member confirms they are carrying high risk goods. And/or	<ul> <li>unacceptable level of biosecurity risk.</li> <li>Goods imported as personal/non- commercial contents via the vessel pathway have an unknown level of quality control and unknown origin, and a lack of detailed pre-arrival notification making it difficult to target and intercept high risk</li> </ul>	• Where a person brings or imports goods that pose a high risk of introducing khapra beetle (Attachment A), it may be open to a biosecurity officer to suspect, on reasonable grounds, that the biosecurity risk associated with the goods is unacceptable. This will be relevant when deciding whether to require a biosecurity
During a non-commercial vessel inspection or a crew change inspection of crew leaving	<ul><li>goods.</li><li>Khapra beetle, is a cryptic pest, being able</li></ul>	<ul><li>measure under Chapter 3 powers.</li><li>It is recommended that high-risk goods are</li></ul>
a commercial international maritime vessel, goods posing a high risk of hosting khapra	• Khapra beetle, is a cryptic pest, being able to withstand extreme temperatures and undergo periods of diapause (hibernation)	either:

presented with a valid import permit).contributed to its global spread, and dispersed further through international movement of infested seed and plant products.Australian territory ( <b>note:</b> this not available for non-commerci- vessels) OR• Khapra beetle is known to be a difficult pest to treat and requires very high levels of methyl bromide treatment or lengthy periods of time exposed to heat. Treatment may not be effective, if the khapra larvaa are in diapause, or if goods are packaged in a way to prevent effective exposure to the fumigant or heat treatment.• forfeited to the Commonwealt 628) for destruction (Section 1 3) are not co to be effective in managing the bio risk; and export of goods that have obtained from a non-commercial w would require storage which may or effective at managing the biosecure	Detecting the biosecurity risk	Biosecurity risk	Managing the biosecurity risk of the goods onshore
<ul> <li>to manage the risk posed by khapra beetle.</li> <li>Khapra larvae are also difficult to detect in seeds, as the larvae may be located inside the seed (thus not visible, unless a destructive sampling process is undertaken).</li> <li>Managing consignment of high-risk fumigants must be able to permea packaging of the products. Package such as rice are often distributed for personal use in ready retail package as plastic sealed bags (non-permea gas). Opening the packages may in the risk of spillage and may lead to escaping into the surrounding environment.</li> </ul>	beetle are detected (excluding goods	<ul> <li>for extended periods (years) which has contributed to its global spread, and dispersed further through international movement of infested seed and plant products.</li> <li>Khapra beetle is known to be a difficult pest to treat and requires very high levels of methyl bromide treatment or lengthy periods of time exposed to heat. Treatment may not be effective, if the khapra larvae are in diapause, or if goods are packaged in a way to prevent effective exposure to the fumigant or heat treatment.</li> <li>The biology of khapra beetle, being a pest that is smaller than 3mm makes it a pest difficult to detect in contaminated food products, such as rice. This makes inspection on arrival an unreliable measure to manage the risk posed by khapra beetle.</li> <li>Khapra larvae are also difficult to detect in seeds, as the larvae may be located inside the seed (thus not visible, unless a destructive sampling process is</li> </ul>	<ul> <li>returned to the vessel for export out of Australian territory (note: this option is not available for non-commercial vessels) OR</li> <li>voluntarily disposed of (note: this option is not available if non-compliance action is pending) OR</li> <li>forfeited to the Commonwealth (Section 628) for destruction (Section 136).</li> <li>These actions are recommended as treatments (Section 133) are not considered to be effective in managing the biosecurity risk; and export of goods that have been obtained from a non-commercial vessel would require storage which may not be effective at managing the biosecurity risk.</li> <li>Fumigation may not be effective for managing consignment of high-risk goods as fumigants must be able to permeate the packaging of the products. Packaged goods, such as rice are often distributed for personal use in ready retail packaging, such as plastic sealed bags (non-permeable to gas). Opening the packages may increase the risk of spillage and may lead to insects escaping into the surrounding environment.</li> <li>Heat treatment may not be an effective treatment for personal consignments (pre-</li> </ul>

Detecting the biosecurity risk	Biosecurity risk	Managing the biosecurity risk of the goods onshore
		<ul> <li>product would affect the integrity of the product. Opening the packages may increase the risk of spillage and may lead to insects escaping into the surrounding environment.</li> <li>Treatment of personal consignments will not be able to be performed at the site of inspection and would require movement to a department-approved treatment provider, though transportation is not always under biosecurity supervision. The transportation of high-risk products potentially infested with khapra is considered to present an unacceptable risk, due to potential for inadvertent spread of the pest beyond the original inspection location.</li> </ul>
		<ul> <li>Export of items obtained from a non- commercial vessel requires goods to be stored prior to collection by the exiting traveller or by Australia Post. The storage of high-risk products potentially infested with khapra is considered to present an unacceptable risk, due to potential for inadvertent spread of the pest into the storage location. Additionally, the traveller may not depart Australian territory from the same port as the port where the goods have been stored.</li> </ul>

Detecting the biosecurity risk	Biosecurity risk	Managing the biosecurity risk of the goods onshore
		• When directing for destruction importers are to be given the opportunity to provide submissions in relation to the decision.
Suspect khapra beetle (including adult beetles (dead/alive), larvae (dead/alive) and cast skins) are detected during a non- commercial vessel inspection or a crew change inspection of crew leaving a commercial international maritime vessel.	<ul> <li>Goods posing a high risk of contamination or infestation with khapra beetle have the potential to introduce, establish and spread this pest into Australia, that could cause harm to human health, plant health and have serious economic consequences.</li> <li>The department has conducted a risk assessment, <i>Risk assessment to manage the threat to Australia's biosecurity from khapra beetle (Trogoderma granarium) and other Trogoderma species of plant-based stored products and determined that goods posing a high risk of hosting khapra beetle pose an unacceptable level of biosecurity risk.</i></li> <li>Suspect khapra beetle (including adult beetles (dead/alive), larvae (dead/alive) and cast skins intercepted in baggage are to be submitted to Operational Science and Surveillance for identification and data collection.</li> <li>Khapra beetle (all life stages) is difficult to identify and exotic <i>Trogoderma</i> spp. can only be positively confirmed by trained entomologists, using both morphological characteristics (under a microscope) and</li> </ul>	<ul> <li>Biosecurity officers may exercise 'biosecurity risk assessment powers' (s 123-129) such as requiring documents, asking questions, or inspecting the goods to assess the biosecurity risk associated with the relevant goods</li> <li>Biosecurity officers may choose to exercise the biosecurity measure powers (s 131-136) if they suspect, on reasonable grounds, that the biosecurity risk associated with the goods is unacceptable. This may be by considering the information in the Department's risk assessment, as well as the result of the exercise of the biosecurity risk assessment powers</li> <li>Where a suspect khapra beetle (including adult beetles (dead/alive), larvae (dead/alive) and cast skins insect) has been detected, and therefore an unacceptable biosecurity risk, it is recommended that goods are either:         <ul> <li>voluntarily disposed of by the traveller (note: this option is not available if noncompliance action is pending) OR</li> <li>forfeited to the Commonwealth (Section 628) for destruction (Section 136).</li> <li>Goods should be securely packaged to manage the infestation risk prior to</li> </ul> </li> </ul>

Detecting the biosecurity risk	Biosecurity risk	Managing the biosecurity risk of the goods onshore
	<ul> <li>confirmation through diagnostic Polymerase Chain Reaction (PCR) testing. Formal identification processes can take several days to complete.</li> <li>High risk goods (Attachment A) are inherently attractive to a variety of storage pests, including khapra beetle, as the product provides a nutritional food source.</li> <li>Stored seeds are vulnerable to pest attack because of their prolonged period of storage (often more than one year) and because seed varieties are stored in relatively small quantities in separate packages that usually exclude the possibility of active ventilation and of regular inspection and monitoring.</li> <li>Seeds are marketed and transported over long geographical distances which promotes repeated introductions of invasive stored seed pests and their global spread.</li> </ul>	<ul> <li>destruction. Additional considerations may be required if suspect khapra beetle infestation occurs throughout the traveller's baggage/personal effects. In such cases, biosecurity officers must seek advice from Operational Science and Surveillance and/or their supervisor.</li> <li>Fumigation may not be effective for managing personal consignments of high-risk goods as fumigants must be able to permeate the packaging of the products. Packaged goods, such as rice, are often distributed for personal use in ready retail packaging, such as plastic sealed bags (non-permeable to gas). Opening the packages may also increase the risk of spillage and may lead to insects escaping into the surrounding environment.</li> <li>Heat treatment may not be an effective treatment for personal consignments (prepackaged goods, bagged), as the temperature monitoring required within the product would affect the integrity of the product. Opening the packages may also increase the risk of spillage and may lead to insects escaping into the surrounding environment.</li> <li>Treatment of personal consignments will not be able to be performed at the site of inspection and would require movement to a department approved treatment provider, though transportation is not always under biosecurity supervision. The transportation of</li> </ul>

Detecting the biosecurity risk	Biosecurity risk	Managing the biosecurity risk of the goods onshore
		<ul> <li>high-risk products potentially infested with khapra is considered to present an unacceptable risk, due to potential for inadvertent spread of the pest beyond the original inspection location.</li> <li>Export of items with potential high-risk infestations is generally not permitted when detected during a crew change inspection of crew leaving a commercial international maritime vessel, and no change to this standard practice is recommended for</li> </ul>
		<ul> <li>potential khapra beetle infestations.</li> <li>Export of infested items obtained from a non- commercial vessel requires goods to be stored. The storage of high-risk products potentially infested with khapra is considered to present an unacceptable risk, due to potential for inadvertent spread of the pest into the storage location. Additionally, the traveller/vessel may not depart Australian territory from the same port as the port where the goods have been stored</li> </ul>
		<ul> <li>where the goods have been stored.</li> <li>When directing for destruction importers are to be given the opportunity to provide submissions in relation to the decision.</li> </ul>

# Attachment A: Goods that pose a high risk of hosting khapra beetle (*Trogoderma granarium*)

The urgent actions will be applied to the following plant products (in various raw and physicallyprocessed forms for any end use), which have been identified as high-risk:

- Rice (Oryza sativa)
- Chickpeas (Cicer arietinum)
- Cucurbit seed (Cucurbita spp; Cucumis spp; Citrullus spp.)
- Cumin seed (*Cuminum cyminum*)
- Safflower seed (Carthamus tinctorius)
- Bean seed (Phaseolus spp.)
- Soybean (*Glycine max*)
- Mung beans, cowpeas (Vigna spp.)
- Lentils (Lens culinaris)
- Wheat (*Triticum aestivum*)
- Coriander seed (*Coriandrum sativum*)
- Celery seed (Apium graveolens)
- Peanuts (Arachis hypogaea)
- Dried chillies/capsicum (Capsicum spp.)
- Faba bean (*Vicia faba*)
- Pigeon Pea (*Cajanus cajan*)
- Peas (Pisum sativum)
- Fennel seed (Foeniculum spp.)

#### Exclusions

Note: exclusions apply see <u>Urgent actions to protect against khapra beetle (Trogoderma granarium)</u> webpage.