



## Recommendation for interceptions and findings of *Etiella zinckenella* (Lepidoptera: Pyralidae), a seed-boring caterpillar of beans and peas.

10 July 2013

This is the result of a brief assessment of readily available literature which indicates that statutory action against this organism is unlikely to be appropriate.

<b>Species / Taxonomic group</b>	<b><i>Etiella zinckenella</i> (Lepidoptera: Pyralidae)</b>
<b>Reason for assessment</b>	There have been two interceptions in 2013, both from India (on <i>Psophocarpus tetragonolobus</i> (winged bean) and <i>Pisum</i> sp. (pea)). In 2011, there were two further interceptions from India (on <i>Dolichos lablab</i> (hyacinth bean) and <i>Phaseolus</i> sp. (beans)), and one from Morocco on <i>Solanum melongena</i> (aubergine). Prior to this, there had been occasional interceptions from the 1950s to the 1990s, often associated with produce from Africa, some consignments with very high numbers of larvae.
<b>Pest distribution</b>	Pantropical, widely distributed in tropical and warm temperate parts of the world, with the exception of Australasia and the Pacific Islands where it is more limited. In Europe, it has been recorded from Austria, Bulgaria, Cyprus, Czech Republic, France, Germany, Greece, Hungary, Italy, Portugal, Romania, Serbia, Spain and Ukraine, but it is not clear which of these countries have breeding populations. There are four records of adults from southern England, suspected to have originated from southern Europe as <i>E. zinckenella</i> is a known migrant.
<b>Hosts</b>	The overwhelming majority of host records are from species in the Leguminosae (beans, peas, lentils, etc.), which include over 30 host species in 21 genera. There are records of <i>E. zinckenella</i> on other plant families, but many are interceptions, thus larvae could be incidental and not true host records.
<b>Pest status</b>	Larvae can cause severe damage to many species of beans, feeding inside the pods on the seeds. Each larva can damage several seeds during its development. Studies have reported overall damage to pigeon pea crops at 25-40% in China, and up to 80% in Egypt. On a per seed basis, reported damage rates vary from 12% to 15-44% in Indonesia and Brazil respectively. There are a number of papers available on economic thresholds and control of <i>E. zinckenella</i> .
<b>Potential distribution and impact</b>	The distribution of <i>E. zinckenella</i> suggests it is unlikely to be able to establish out of doors in the UK, though transient populations may be able to cause local damage to field crops of legumes in the summer. However, no reports were found of damage to crops in Europe outside of the Mediterranean region, e.g., northern France. Suitable hosts are not grown commercially in protected cultivation.
<b>No statutory action is recommended because:</b>	
The distribution of the pest indicates that it would be unable to survive outdoors in the UK and the hosts are not grown in protected environments.	
Migration provides a natural pathway for establishment of the pest in the UK that would not be affected by taking statutory action against produce.	
The species is already present in the EU.	