



The Food & Environment
Research Agency

Recommendation for interceptions and findings of *Citripestis sagittiferella*, a citrus fruit boring caterpillar

18 September 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.

Species / Taxonomic group	<i>Citripestis sagittiferella</i> (Moore) (Lepidoptera, Pyralidae)
Reason for assessment	There was one confirmed interception in 2011, when adults were reared from <i>Citrus aurantifolia</i> fruit (lime) from Malaysia. In 2013, there were a further two suspect findings, both from Malaysia, on fruit of <i>Citrus latifolia</i> (Persian lime) and <i>Citrus</i> sp., but adults could not be reared to confirm the species from either sample. Additionally in 2013, another suspected caterpillar of <i>C. sagittiferella</i> was found in an orange by a member of the public in London, who took it to the Royal Horticultural Society for identification.
Pest distribution	Apparently restricted to South-East Asia, with records from Brunei, Indonesia, Malaysia, Singapore and Thailand. There are anecdotal reports that <i>C. sagittiferella</i> has been present in Vietnam since 2011.
Hosts	The major hosts are all in the Rutaceae, and are predominantly species of <i>Citrus</i> . There are also host records from the Leguminosae (beans). However, these records might refer to <i>Mussidia pectinicornella</i> , another species of moth that was incorrectly synonymised with <i>C. sagittiferella</i> for some years.
Pest status	The larvae feed initially in the rind and pith of the fruit, later moving deeper into the flesh. This may cause premature fruit drop, or spoilage (due to tunnels and frass), and allows the entry of pathogens, causing secondary rot in the fruit. Most sources state this pest is a minor pest of <i>Citrus</i> . However, anecdotal reports from Vietnam, where <i>C. sagittiferella</i> has apparently only been present for about two years, suggest that it is causing major losses of up to 80% to grapefruit and oranges at some sites.
Potential distribution and impact	<i>Citripestis sagittiferella</i> is unlikely to establish outdoors in the UK as it is a tropical or subtropical pest, and hosts are not widely grown in this country. As it is a fruit pest (no reports could be found of damage to e.g., leaves), this further limits host availability (as many <i>Citrus</i> grown privately in this country produce little fruit). If an outbreak was to occur, e.g., in a botanical garden, it is likely to be contained and thus eradication is more likely to succeed. This pest may, however, be of concern to <i>Citrus</i> -growing southern EU states, as the potential impacts could be higher in these regions.
No statutory action is recommended because:	
This is a tropical or subtropical pest, unlikely to survive out of doors in the UK.	
Suitable hosts are not grown commercially.	
There is no obvious pathway of introduction (nor previous records of this pest) for <i>Citrus</i> plants grown in protected cultivation.	