

KVH Unusual Symptom Report



Detailed report relating to armillaria mushrooms on rootstock



Image from 15 May 2019, versus image from 29 May 2019

Date of report: 5 June 2019

What was found?	Orchard Manager noted a cluster of mushrooms on a Bruno stump within a mature Hayward block. No additional symptoms were observed and no further vines with mushrooms were found within the block (which was planned for conversion to Gold3 in winter).
Where?	Paengaroa
When?	26 May 2019
Reported by	Orchard Manager
Kiwifruit variety	Hayward on Bruno rootstock.
Symptoms	Cluster of mushrooms on vine trunk – no other obvious symptoms.
Action taken	Mushrooms collected and identified by staff at Plant & Food Research.
Outcome and requirements going forward	The sample was identified as the mushroom stage of <i>armillaria novae-zelandie</i> , a plant pathogen that is one of three New Zealand armillaria species, and the one most commonly found in kiwifruit orchards. Armillaria is a honey fungus, very common to New Zealand forests where it rapidly decomposes weakened trees and fallen logs. Armillaria mushrooms are rarely seen in kiwifruit orchards but can appear April to July on vine wood with advanced decay. Recommendation is to monitor vines in the block and adjacent plants for armillaria symptoms with surgery of any infected trunk and root material advised. Sluicing to clear soil around the root crown is considered best practice for affected vines as drying and exposure to sunlight kills the active fungus. If replanting, remove as much of the old vine and infected root fragments as possible to avoid infection transfer. Ideally replant 1.5 - 2m either side of the old plant site. Armillaria symptoms include cracked bark at the trunk base, sometimes with dark staining or ooze; and/or dense white fungal mats beneath the bark which may advance up the trunk causing a wet mushy rot with a strong mushroomy smell.

