

Internal rot of capsicums and chillies is a major ongoing issue for Australian growers, typically those in warm, humid growing areas. It affects both field and greenhouse grown fruit, especially if humidity is not well controlled. The disease generally affects the seed inside the fruit rather than the edible portion.

Although infection is believed to occur at flowering, the disease usually does not develop until the capsicum/ chilli starts to ripen, with spread most rapid after harvest. As the disease cannot be detected from the outside, infected fruit can be sent to market. This can lead to consignments being downgraded or destroyed, as well as affecting consumer confidence and purchases.

Several different fungi can cause the disease, including species of *Fusarium* and *Alternaria*. However, it is unclear which is/are the main organism(s) responsible for this disease in Australia. This project will identify the causal organism(s) and develop management techniques to both prevent infection and minimise the risk of sending unacceptable fruit to market.



In order to determine the causal agent(s) in Australia, we need affected capsicums and chillies from the Australian capsicum and chilli industry (see sample instructions, please turn over).

The other key activities of the project are to:

 investigate how the disease spreads, including the impact of environmental conditions and role of host susceptibility to infection

 develop a predictive model that will help growers identify crops at risk, and work as a method for early diagnosis

 combine chemical, biological and cultural controls to develop an integrated disease management (IDM) strategy controlling internal rot of capsicums and chillies

 develop postharvest controls e.g. pre-cooling high-risk fruit and marketing before infections develop

 verify the IDM strategy through on-farm field trials

 communicate outcomes to field and greenhouse capsicum and chilli growers.





INTERNAL FRUIT ROT OF CAPSICUMS AND CHILLIES (VG17012)

SAMPLE REQUEST

Step 1: Reporting Details			
Name:		Date: /	1
Address:			
Town/suburb:		Postcode:	:
Mobile:	Email:		
Step 2: Sample Informati	ON - Complete this for each sample		
✓ Collect plant samples that have✓ Try to send whole fruits.	a typical range of symptoms, from I	ight to severe.	
SAMPLE NAME/No. (correspon	ding to bag label):		
Planting date, crop age (days or	weeks) or crop growth stage:		
Date collected: / /	Crop type, variety:		
Distribution of symptoms:	☐ scattered plants	□ patches	□ over large areas
Other factors:			
e.g. weather events, waterlogging, herbicides, fu	ingicides, previous crops, major weeds, water q	uality	
Sample ID (Pathologist to compl	ete):		

Step 3: Packing and Sending Samples

✓ Pack samples in labelled ziplock plastic bags and seal well – keep cool
✓ Send samples early in the week (Mon→Wed) to avoid delays over the weekend

① DO NOT place this request form in direct contact with the sample

Contact Len Tesoriero 0447 623 487 if you have questions

EXPRESS POST

NSW Department of Primary Industries Locked Bag 26 GOSFORD NSW 2250 **COURIER** *Preferred option

NSW Department of Primary Industries Central Coast Primary Industries Centre University of Newcastle, Ourimbah Campus North Loop Rd, OURIMBAH NSW 2258



