

Tuber blight in perspective

Many growers still consider tuber blight to be a different disease to the fungus that attacks potato leaves and stems, causing such visible damage in our crops, writes Barrie Florendine UAP's national potato specialist.

In 2007 this idea gained further ground as we went through probably the worst blight season on record, yet we saw very little if any tuber blight in stored crops. A touch more in "green top" I grant you but very little in store. I have some particular thoughts on why this is likely to have happened. The 2007 season was a shocker because the first outbreaks occurred early in May and then developed rapidly as ideal warm damp weather followed. Incidentally, the first outbreak of 2010 has already come and gone, but as it occurred in April in a glasshouse crop in Cornwall no one seemed terribly worried about it.

The 2007 epidemic carried on all season and the potato crops received massive amounts of fungicide, often from the very latest available chemistry. Costs were astronomic and chemical loading on leaves was as high as I can ever remember. In some instances multiple tank mixes were applied at five day intervals and we were just about holding the spread when something dramatic happened - it stopped raining. This was without doubt the key event in that season. We then went into a prolonged dry spell that lasted through to the end of harvest in most cases.

Although blight was still present on infected plants, it was unable to reach the tubers because of the dry soil acting as a barrier to the movement of zoospores. Those storing crops were able to let the haulm die right back before harvesting into store, so they got away with it almost completely. Not so at "green top" harvest I hear you say. In this situation, direct infection



was occurring as tubers touched infected haulm at lifting time. This sequence of infection is more difficult to prevent as the haulm does need to be blight free in order for tubers to be safe. Add a little bacterial infection in at the same time and you could have "meltdown". Where some growers get confused is where tuber infection occurs in the apparent absence of any foliar symptoms. This can happen if there is disease still in the latter part of its latent phase (before leaf lesions appear) or where lesions are small and difficult to see. Cross infection of tubers then occurs as the harvester handles both smashed up tops and skinning potatoes as they come up the webs.

So what course of action is required in order to minimise the problem? Firstly

use a fungicide program and a spraying interval that reflects the risk you are under. In the main potato areas in the South East this is nearly always high due to early planting, varietal risk and disease carryover. There are one or two hot spots either side of the Thames estuary that conspire to make matters worse. So, faced with this pressure you need a good quality product applied in a reasonable water volume (very important) at close intervals. This should solve the problem, but as always the 'devil is in the detail'.

Not all fungicides are equal in performance and tuber blight particularly sorts the top products from the also-rans. The Euroblight chart can help both growers and advisers alike choose appropriate products. If you check it out on www.euroblight.net/fungicides you will be able to see the active ingredients that are thought most effective on tuber blight as well as other aspects of control. Top products would include

Ranman and Infinito; indeed Infinito has a label claim to give tuber blight control. These would be closely followed by fluazinam (Tizca or Volley for example). If these products can be applied in your programs once tubers are rapidly developing, then you are doing all you can to minimise your risk. There is flexibility there to meet your harvest interval requirements and the gaps in the program can be filled with other effective fungicides such as Valbon, Shinkon and Revus.

One last note that helps reduce the impact of blight early in every season and that is to check and destroy all potato dumps you may have around the farm and to employ a herbicide strategy in other crops that takes out the volunteer potatoes that might emerge.