

Dear Spud GP

Some of my spuds are looking pretty ugly - can you tell me what's going wrong here?

Doug



# ASK THE SPUD GP

Dear Doug

It looks like the symptoms include a sunken region around the apex as well as angled corky lesions. These could potentially be caused by several possible plant pathogens, or even a physiological issue.

For example, a strain of the fungus *Rhizoctonia solani* (AG3-PT) has been shown overseas to cause polygonal lesions (also known as elephant hide) on potato tubers. *Rhizoctonia* infections can cause dimpling of the tuber apex as well as typical 'black scurf' markings on tubers and dark lesions on stolons and roots.

While *Rhizoctonia* sounds a likely culprit, it is a mistake to assume a single cause just from looking at a photo. Netted scab (*Streptomyces* spp.) can cause similar symptoms. Sending a few samples to a plant pathology laboratory is really the only reliable way to identify the culprit.

Some studies have even suggested that elephant hide symptoms can simply be a physiological response to plant stress. Environmental conditions such as excess humidity, or high organic matter around the tubers during development, can trigger the disorder.

But of course, these conditions also favour the growth and infection of fungal pathogens such as *Rhizoctonia* and netted scab!

Preventative strategies for the future include:

- Growing a potato variety that is *Streptomyces* resistant (if that is the cause).
- Making sure tubers or planting holes are treated with an appropriate fungicide.
- Organic matter from previous crops or weeds is well degraded before planting.

- Minimise plant stress caused by too much or too little water.
- Given there are other pathogens that may cause similar symptoms, do a soil test before planting then monitor crops for disease symptoms.
  - For example, key symptoms that can help to identify *Rhizoctonia* include the formation of aerial tubers on stems and a dry, white fungal collar at the stem base.

Good luck Doug, and let's hope your next harvest is a lot more attractive!

**Contact the spud GP by emailing [info@potatolink.com.au](mailto:info@potatolink.com.au)**