Pear Rust Gymnosporangium sabinae of Black Pear fruit.

Harry Green

Compiled from emails from Sheila Leitch, Peter Roberts, Wade Muggleton and Rosemary Winnall

I received a phone call from Sheila Leitch on 6th December 2016 about pear rust, *Gymnosporangium sabinae*, on a fruit of Black Pear in her garden. An email followed her phone call as follows:

"I have now been able to speak to my next door neighbour, Peter Roberts, who took the photographs, and he is happy for them to be included in a note in Worcestershire Record. Peter was Senior Mycologist at Kew and is now retired. The dwarf Black Pear in my garden, at Wye View, Glasbury, was laden with fruit when I picked them in November but I only found the one fruit affected. Wade Muggleton came here one afternoon, after an identification session in Glasbury, and took photos of the fruiting tree as it appears to be the true Black Pear. He will forward his photos to you shortly as I have just phoned him. The originating tree, from which I collected graftwood, grew alongside an equally old Catillac in the grounds of a 'gentry house' on the Radnorshire side of the Wye, called Woodlands. Both trees long gone, but identified by Ray Boddington, founder member of Marcher Apple Network and our first Chairman. If this is the first record for the Welsh side of the border, I hope we can write an article in the 2017 issue of Apples & Pears, including the interesting background from the Worcestershire Record." Best Wishes, Sheila Leitch, Network Coordinator.

Peter Roberts had written to Sheila Leitch as follows:

"I have taken a look at the strange gall-like thing on the pear and it contains rust spores. It is the pear rust, *Gymnosporangium sabinae*, producing spores on the fruit rather than the leaves. It seems this is unusual, but not unknown (I found a couple of pictures on the internet). Couple of photos attached" (01, 02).



02. Gymosporangium sabinae on Black Pear fruit, Glasbury. Peter Roberts



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Wade Muggleton sent pictures (03, 04) of the ripe fruit on Sheila Leitch's Black Pear tree. See his article on Black Pears (Muggleton 2016) in *Worcestershire Record*.



03. Black Pear fruit, Glasbury. Wade Muggleton.



04. Black Pear fruit, Glasbury. Sunny side on left shaded side of right showing how colour is sunshine dependant. Wade Muggleton.

In October 2016 Rosemary Winnall sent the following note:

"I first spotted this interesting rust fungus on the leaves of our garden Conference Pear tree on 21st September 2005 (Green 2007a). I live in the north of the county at Bliss Gate near Bewdley, and I'd

not recorded it before, although it apparently was present elsewhere in the county at that time.

Since that time the rust has spread and is now very common with most pear trees in this locality being affected. Whilst on a fruit tree pruning course at Haye Farm near Bewdley on 7th October 2016, I noticed the rust on the leaves of their pear trees (07), and made a mental note to record it. But I was very surprised to see it also on the fruit of a Worcester Black Pear (05. Unblemished pears 06). This is my first record of it on the fruit, although I see Roger Umpelby (2007) found it on a Comice Pear, although he states that "lesions on fruit are extremely rare". Are they becoming more common I wonder?"



05. *Gymnosporangium sabinae* on Worcester Black Pear fruit, Haye Farm. Rosemary Winnall.



06. Worcester Black Pears. Rosemary Winnall.



07. *Gymnosporangium sabinae* on Worcester Black Pear leaves, Haye Farm. Rosemary Winnall.

In the last 12 years or so we have reported *Gymnosporangium sabinae* on pear leaves (Green 2007a & 2007b) but only once on fruit (Umpelby 2007). Green & Wade (2013) reported it from juniper, the second host in the life-cycle.

References

Green, H. 2007a. Pear leaf gall caused by the rust fungus *Gymnosporangium sabinae. Worcestershire Record.* 21:49 Green, H. 2007b. Pear leaf gall caused by the rust fungus *Gymnosporangium sabinae. Worcestershire Record.* 22:33 Green, H. & Wade, J. 2013. Pear leaf gall *Gymnosporangium sabinae* on juniper. *Worcestershire Record.* 34:18 Umpelby, R. 2007. Pear Rust. *Worcestershire Record.* 22:34. Muggleton, W. 2016. The Black Worcester Pear. *Worcestershire Record* 40:40-44.