

Would the real Black Worcester Pear please step forward.

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The Worcester Black Pear mystery as reported in the *Worcestershire Record* (Muggleton 2016) has developed further as a result of DNA analysis which has shed some light on what is possibly the most ancient pear variety still in cultivation.

Historical anecdote has suggested that the pear we know here in Worcestershire as the Black Worcester or Worcester Black, (people are equally divided as to which way around the name goes) was originally bought to the city by Monks from Warden Abbey in Bedfordshire, where the pear, or at least a pear, appears in monastic reference as far back as the 13th century.

Warden or Wordon pears have today come to mean a group of large hard pears that never ripen fully and so are only any good as culinary or cooking fruit. Today the generic term Warden Pear includes a range of large culinary pear varieties such as Catillac, Uvedale St Germain, Bellissime de Hiver and the Black Worcester. Whilst all are completely distinct varieties they are all large hard cooking quality pears.

The Romans supposedly introduced a pear of this type known as the Iron Pear, perhaps named after the hard characteristic and some have gone on to suggest that the Worcester black is indeed the original iron pear. Were this to be the case it would make it the longest

variety in cultivation suggesting an unbroken lineage of 2000 odd years. We will probably never be able to prove or disprove this theory unless some pear pips were ever found in Roman archaeology and that some future as yet to be discovered technique were able to DNA test them against the profile of living varieties. Science fiction aside, we are able to compare is the various “Warden” type pears still in cultivation?

It was as a result of community interest in the village of Warden in Bedfordshire and the involvement of the nearby Shuttleworth College, that horticultural lecturer Paul Labous was granted a small Heritage Lottery grant to investigate the story of the Warden pear, via DNA analysis. He collected samples from 9 different pear trees in Bedfordshire believed to be, or labelled in collections as Warden Pears, and Black Worcester pears. In addition I submitted specimens from the three types described in my previous article, that I refer to as the Worcester Woods type, The Cripplegate type and the Martley Type, named simply by the place the tree is growing.

Initial (pre DNA testing) theory on my part; was that the Cripplegate and Martley trees were the same but that they appeared to be distinctly different from the Worcester Woods type, throwing up the scenario that there were two pretenders to the crown of claiming to be the Black Worcester, something I am not aware that anyone else had ever noticed until Paul Labous and I went collecting various samples and looked at them in detail.

So 12 samples were sent for DNA analysis and the results are shown in the table.

| Sample name | Sample location | Result |
|-------------|---|---|
| 1WT | Pyrus ‘Warden’ grown in Turvey Community Orchard | Black Worcester |
| 4UW | A pear being grown at Worcester Woods in Worcestershire | Black Worcester |
| 5WSW | The pear being grown at Shuttleworth College in Bedfordshire, near to the Village of Old Warden Label – ‘Old Warden Pear Trees’ | Black Worcester |
| 6WHO | A pear being grown at Harrold and Odell county park, Bedfordshire – labelled ‘Old Warden’ | Black Worcester |
| 9WD | A specimen being grown at Dunton Community Gardens, Bedfordshire – labelled ‘Pear Warden’ | Black Worcester |
| 10BWD | A specimen being grown at Dunton Community Gardens, Bedfordshire – labelled ‘Worcester Black’ | Black Worcester |
| 2UM | A pear being grown at Martley in Worcestershire. | Not Black Worcester but identical to 3BWC |
| 3BWC | A pear being grown at Cripplegate Park in Worcestershire – labelled ‘Worcester Black Pear’ Planted 1932 | Not Black Worcester but identical to 2UM |
| 7WR | A pear being grown by Chris Hill Rushden, Hertfordshire | Not Black Worcester & not identical to 8WOW |
| 8WOW | A pear being grown at Warden Street, Mr Lewis, Bedfordshire – thought locally to be a ‘Warden’ | Not Black Worcester & not identical to 7WR |

Conclusions and Controversy?

Five of the samples from Bedfordshire (1WT, 5WSM, 6WHO, 9WD and 10 BWD) all have the same DNA profile as the Worcester Woods type (4UW). This is set against the DNA of the National Fruit collection and what they have as being Black Worcester. The Martley & Cripplegate specimens were proved to be the same as each other but were not Black Worcester. Of the four remaining Bedfordshire samples one (11WA) was Catillac whilst the other three were not Black Worcester nor the same as each other.

The pictures 01, 02, 03, 04 appeared in my original account (Muggleton 2016) and are shown again here with explanatory captions.

From the Worcestershire perspective there are two interesting facets to these results, firstly it does suggest that the historical anecdote about the Warden Pear of Bedfordshire and Black

Worcester being the same could be true. Which way it travelled and which county had it first will probably long be a rivalry and one that will probably never be resolved. Secondly if they are not Black Worcester what are the Martley & Cripplegate specimens? The tree in Cripplegate Park with its plaque and planting date of 1932 was planted by no less person than the future King and makes the boldest and perhaps most famous claim to being “Worcester Black Pear” yet the science says otherwise? They do not match any other variety that has been DNA profiled so what could they be? From here on it gets largely speculative but there is a very vague reference to a Worcester Silk Pear, although you won’t find any reference works; one anecdote from the Colwall area claimed it to be “like a Black Worcester but different”. The Colwall Orchard Group (COG) know of a tree that it is claimed is a Worcester Silk. Frustratingly this tree did not produce a single fruit in 2016 so we have to wait and see if it will yield any clues this year.

There was once an array of these “Warden” type culinary pears. In 1676 nurseryman John Rea offered in his catalogue a Painted Pear, Turnip Pear, Canterbury pear, Quince Pear, French Warden, Spanish Warden, Great Warden, Parkinson’s Warden, Red Warden, White Warden and Bell pear, claiming all were very good pears to bake. Whilst in 1667 London nurseryman George Ricketts made reference to a Red Worcester and a White Worcester. Little is known of any of these varieties in terms of ever being able to attempt any form of identification, there simply isn’t anything to go on: descriptions, anatomy details etc just don’t exist. So if the Martley/Cripplegate specimens were perhaps one of these historic varieties we sadly will almost certainly never know. It is claimed by Bunyard (1920) that the Black Worcester is almost certainly the same as the French variety Poire de Livre of Leroy, something future DNA studies maybe able to investigate.

We should not be judgmental or harsh on the Cripplegate tree’s claim, it could simply be that in 1932 it was believed to be Worcester Black, or that in the haste to find a tree for a royal dignitary to plant the parks department were simply supplied with a “Wrong-un”. Mistakes and misidentification are widespread in Pomology.

I have only come across four trees of the Cripplegate/Martley type so it is rare, far rarer than the Worcester Woods type. Attempts to graft some in 2016 onto modern commercial quince rootstocks were a spectacular failure, so in 2017 we are attempting to graft some onto *Pyrus communis* rootstocks, to see if pear on pear makes for better compatibility. Ongoing work ... in progress.

There is still a further complication in that 1629 Parkinson provided a drawing of the Warden pear showing it as a Pyriform shape (the classic long Conference Pear shape) and on the counter seal of Warden abbey the pear is also shown as pyriform, whereas the Black Worcester is a conical to oval shaped pear. So if these historical representations are correct then the historic Warden is not Black Worcester but a different pear anatomically altogether. J A Parkinson in his *Paradisus Solei, Paradisus Terrestris* of 1629 illustrates the warden and the Pound Pear alongside each other. Again the former is Pyriform and the latter conical/bergamot shape so clearly two different varieties, yet by 1884 the eminent Pomologist Robert Hogg in his *Fruit Manual* has Black Worcester with the synonyms of Pound pear and Parkinson’s Warden, so he seemingly lumped together what historical reference suggests were three different varieties.

It is possible the Warden Pear referred to in the 13th century monastic records is actually lost and has subsequently been mixed up with the Black Worcester: this would explain the shape discrepancies. Although conversely the Worcester coat of arms also often shows a pyriform pear shape which the Worcester Black is not, so perhaps there is an element of artistic licence in the way pears are drawn. The entire subject of Pears is such an under-studied area, compared to apples. It is claimed that the Romans and even the Normans had more types of pear than they did of apples so countless varieties have almost certainly gone extinct and even of those still left mysteries abound. I was sent some samples of three different pears growing on incredibly old trees in the Newland area and whilst my knowledge of pears is limited to say the least, (they were not remotely Warden types) I could find nothing to compare them with in the standard texts. So there may well be a number of as yet unidentified pears hanging on as old trees tucked away in obscure corners of the county.

Whilst this type of fruit detective work is fascinating there is equally a large sense that it will forever be an incomplete story, too many parts of the puzzle are simply and sadly missing.



01. The Cripplegate tree. Despite the plaque DNA says not a Worcester Black Pear. W. Muggleton.



02. Fruit from the Cripplegate tree in October 2015. Despite the plaque DNA says not a Worcester Black Pear. W. Muggleton.



03. The more common Worcester Black, the Worcester Woods type. Confirmed Worcester Black Pear. W. Muggleton.



04. The Martley trees. Not a Black Pear but the same as the Cripplegate Pear. W. Muggleton.

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Images

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