WATERGORE TRIAL ORCHARD

NOTE

This trial site no longer exists and unfortunately some of the LA Disease Resistant seedling were grubbed out. Propagating material is still available of most of the other cultivars mentioned.

SUMMARY

Planted 1990

Main orchard planted to double rows N/S of Major, Ashton Bitter, Ellis Bitter and White Jersey at 18 x 8 on M25.

This rootctock has proved rather too vigorous for the good soil on this site. In retrospect more effort was needed to control the early growth of these trees and induce cropping. The pruning trial [NACM 95/5/1] demonstrated some response to belated pruning to centre leader and bending or tying down strong lateral branches. This has served as a useful model for other orchards of these varieties.

Planted 1995

Selected early harvesting seedlings from the Long Ashton [LA 1978] breeding program; 2 bittersweet, 4 sharps and 1 sweet, planted E/W on MM 106.

Poor tree shape and excessively early flowering has ruled out many of these. The best are LA 13/2 and LA 13/7, Tremletts crosses with a strong resemblance to the parent but with some resistance to scab and mildew. Both need some initial tree training but could be kept annual.

Planted 1996

Selected old varieties with some potential for bush orchards were planted on MM 106

Of these the most promising are Broxwood Foxwhelp and possibly the other Foxwhelps [all bittersharps], also Don's Seedling [bittersweet] and Crimson King [sharp] as early harvesting varieties. Both Severn Banks [sharp] and Black Dabinett [bittersweet] could make useful late harvesting varieties.

NEW CIDER APPLE VARIETIES FROM LARS BREEDING PROGRAM

1978 LA/DISEASE RESISTANT SEEDLINGS

In 1978, the varieties Dabinett, Chisel jersey and Tremletts Bitter were crossed with pollen parents A423/2, A368/12 and A369/25 bred and selected at HRI East Malling for their disease resistance characteristics. Following early screening for disease resistance and precocity, the seedlings were propagated on MM106 and planted on

five sites. Four selections were put forward for more extensive trials. Further selections were made for early harvesting, and these were planted out on a trial site at MCB's Watergore orchard in Somerset. They are as yet un-named.

BITTERSWEET SELECTIONS

LA 13/2: Tremletts Bitter x A423/2

Fruit: Medium to large, red.

Harvesting: Very early. End of September to October. **Juice:** mild bittersweet, fruity and slightly astringent.

Flowering: Early mid-season.

Disease: Strongly resistant to scab and mildew but slightly susceptible to canker.

Tree training: 13/2 is suitable for intensive and extensive orchards, except in canker endemic areas. This selection is vigorous and makes a tall and compact tree with a good centre leader habit and wide angled lateral branches. Some shoots have a tendency to compete with the leader and need prompt removal. Spurring is relatively sparse, but this selection cropped well in the trial from year three.

LA 13/7: Tremlett's Bitter x A423/2

Fruit: Medium size, yellow and red; woolly texture. **Harvesting:** Maturing late September - early October.

Juice: Sweet, mildly astringent.

Flowering: Early.

Disease: Resistant to scab and mildew.

Tree training: Forms a pyramidical tree with a good centre leader habit, wide angled lateral branches and plentiful spurs and dards. Rather weak and best suited to MM111 or M25 on weaker soils.

SHARP SELECTIONS

LA 17/9: Chisel Jersey x A368/12

Fruit: Large fruited, medium sharp.

Maturing: mid October but shakeable in earlier in the month.

Tree: Moderately vigorous, needs selection for a good centre leader. Many short dards and plentiful spurs. Susceptible to bird damage and brown rot.

An acid apple with juicing potential and good tree form. Fairly precocious, annual cropping and not susceptible to disease.

LA 19/5: Tremletts Bitter x A369/25

Fruit: large fruited, acid apple with juicing potential.

Maturing: Shakeable in early October.

Tree: Rather weak but plentiful laterals and spurs. Best suited to a strong rootstock to prevent overcropping.

Annual cropping, good tree form and precocious cropping. Slightly susceptible to mildew.

LA 20/6: Chisel Jersey x A369/25

Fruit: large fruited full sharp.

Maturing: in late September - early October.

Tree: Upright vigorous multileader with much bare wood. Needs tying or bringing down to form a good centre leader.

An acid apple with juicing potential and good tree form. Annual cropping on old wood only, but could be slightly scab susceptible.

LA 21/6: Dabinett x A369/25

Fruit: large fruited, medium sharp.

Maturing: late September to early October.

Tree: Upright multiple leader shoots at first but not strong and brought down well when cropping in year 3.

An acid apple with juicing potential and good tree form. Annual cropping.

SWEET SELECTION

LA 21/1A: Dabinett x A369/25

Fruit: medium size fruit, low in acid and tannin.

Maturing: October but shakeable early in the month.

Tree: Moderately vigorous with a fair centre leader. Few laterals and often some bare wood. Spreading well with the crop in year 3.

A sweet, annual cropping apple suitable for either juice or cider, with good tree form.

OLD VARIETIES WITH POTENTIAL

BACKWELL RED

A North Somerset variety, which crops rather irregularly as a standard tree. A mid season sharp.

Fruit: Medium, yellow and red flushed.

Harvesting: Mid October.

Juice: Sharp, average quality.

Flowering: early mid season.

Disease: Slightly scab susceptible.

Tree training: Tree is bushy and rather weak with plenty of laterals. Needs care to maintain a strong centre leader. Slow to crop.

BLACK DABINETT [Syn RODFORD]

A late harvesting Somerset bittersweet.

Fruit: Medium, dark maroon flushed.

Harvesting: Early November with Dabinett.

Juice: Good bittersweet.

Tree training: A tip bearer, forms a small weak tree on MM 106. May perform better on MM 111. Good crop in year 3

BROXWOOD FOXWHELP

This is a typical Hereford `Foxwhelp', one of a family, characterised by their small, round, red, bittersharp fruit. Red Foxwhelp and Bulmers Foxwhelp are similar varieties with similar habits. There are limited plantings in bush orchards, but they could be useful varieties providing that their upright growth is brought down to crop in the early years.

Fruit: Small, round, red with a long stalk, and bittersharp.

Harvesting: Late September to early October.

Juice: Full-bodied, bittersharp with plenty of tannin, yielding a quality cider.

Flowering: Early mid-season with Browns Apple.

Disease: Usually fairly pest and disease free.

Tree training: Tree growth is moderately vigorous. On MM106 Broxwood Foxwhelp makes an upright tree with plenty of lightweight laterals. Cropping is heavy, bringing the branches down, but biennial.

BRIMLEY RED = CRIMSON KING

Collected in an old Devon orchard, after cleaning up this variety proved to be the well known West Somerset/Devon sharp, Crimson King. It is a triploid and was traditionally used as a stem builder.

Fruit: Medium to large, crimson striped flush.

Harvesting: October.

Juice: Sharp, usually good quality.

Flowering: Early before Tremletts. Triploid therefore useless as a pollinator.

Tree training: Vigorous but quickly form a good lightweight tree with heavy crops on old wood. Reputed to be a heavy cropper.

BURROWHILL EARLY

Recommended locally as a useful, quality early cider apple, this variety was propagated in the late 1980's from an old orchard in Stembridge, Somerset. BUT has proved to be very tardy coming into cropping and likely to be a poor selection for bush orchards.

Fruit: Medium sized, bittersweet, green with a red flush.

Harvesting: Very early, end of September.

Juice: Medium bittersweet yielding a very fruity cider, a good blender.

Flowering: Mid-season.

Disease: Mildew susceptible.

Tree training: Based on limited knowledge from a trial orchard, Burrowhill Early is a strong growing variety, with plentiful laterals at good angles, and plentiful dards. It is likely to make a medium sized tree, and will probably crop annually when it finally crops.

DON'S SEEDLING

A seedling produced at Long Ashton in the 1950's by Don Wilson, this is a cross between Tremletts Bitter and a disease resistant variety.

Fruit: Very similar to Tremletts Bitter; medium sized, full bittersweet with a heavy, shiny red flush.

Harvesting: Early October. **Juice:** Similar to Tremletts Bitter

Flowering: Early May.

Disease: Showing slight sensitivity to scab.

Tree training: This variety is a lot less vigorous than Tremletts and produces a smaller tree, but it is not a natural centre leader shape.

INRA 184 [SAUVAGEON]

Collected from France as potentially useful for early harvesting, this variety is totally unsuitable for bush orchards in the UK on MM 106. It makes a fragile weak tree which quickly becomes biennial and breaks with the first crop.

REINETTE OBRY

An interesting quality sharp variety which has proved difficult to train as a centre leader tree and seems to crop biennally. An excellent fruit.

Fruit: Medium, fruity sharp, russeted yellow.

Harvesting: Mid October **Flowering:** Mid season.

Juice: Quality juicing or cider sharp.

Disease: Seems resistant.

Tree training: Produces a slow growing tree with rather stout extension growth with short internodes. Stiff and difficult to manage, this variety needs careful training to form a reasonable centre leader.

SEVERN BANKS

A possible late cider variety from North Somerset/Gloucestershire.

Fruit: Medium, green.

Harvesting: Late, November.

Juice: Sharp.

Tree:

Forms a fairly good tree with a natural centre leader and a reasonable crop in Year 3.

TWENTY PIP

This variety was found in an old standard orchard near Exeter in the 1980's.

Fruit: Small to medium sized, conical, pale yellow with a striped red flush.

Harvesting: End of September to early October.

Juice: Mild bittersweet, yielding a rather weak cider with little tannin.

Tree training: This variety is only moderately vigorous and makes a medium sized tree.