Colwall Orchard Group: Safe Way of Working: SWOW09 Apple Juicing

Prepared by: Helen Stace 17 May 2017

Review: Annually thereafter (or in the event of an accident)

Reviewed by: C Blake 25 July 2022

Next review: by 30 April 2023

Introduction

Essentially the process is:

- Preliminary screening and chopping of apples
- Scratting
- Pressing
- Processing juice into containers
- Disposing of pomace
- Clearing up

The equipment should be set up to reflect this sequence, to minimise manual handling of loads and collisions between people engaged in different parts of the process.

Screening and chopping of apples

At public apple pressing events, some members of the public will be bringing their own apples. These should be treated as separate batches and not mixed with other fruit. Do not accept any windfall apples that have been picked from a site that has held domestic livestock within the last 2 months. (apples picked directly off the trees are fine)

We may also want to create some single variety pressings of key varieties. Pears will be juiced separately from the apples, but probably in mixed batches of pears as there are not many around!.

Reject any fruit that shows signs of squishy brown rot as this can contain patulin, which is toxic (ordinary bruises, cuts, peck marks, scabbing etc are fine)

Cut smaller apples into 2 and bigger apples into 4 – the object of this is to check for internal rot (and reject relevant apples) and cut the apples into pieces that go more easily through the scratter.

Pick out larger leaves, slugs, other extraneous wildlife, but don't worry too much about grass etc.

Colwall Orchard Group: Safe Way of Working - SWOW09 - Apple Juicing Lines

Toss bad bits, rejects etc into the waste trug (to go into the builders bag for pig food etc) and good bits into a clean trug.

Scratting

Scratting may either be completed using the electric Speidel Apple Mill or by use of two manual scratters. For use of the electric Speidel Apple Mill please refer to SWOW03 - Use of Speidel Apple Mill.

Important notes

- the handle of the scratter must not be turned until everyone has taken their hands out of the scratter funnel
- the scratters must be secured to the base by cable ties
- do not allow children to use the scratters unattended, although they are welcome to help if you are supervising.

Ist Scratting (for preference use Liz Taylour' knife based scratter)

(This scratter should be tied across 2 workmate benches with cable ties for stability). Feed the apples into the scratter funnel, ensure that all helpers take their hands out of the scratter funnel before turning the wheel. Place the Trug under the scratter and turn the handle. If the apples clog up or start bouncing, press them down into the scratter with the log provided.

2nd Scratting (for preference one of the crusher type scratters)

(This scratter is mounted on a sewing machine base). Place a new clean trug under the scratter before dong anything else. Fill the scratter funnel half full with apples from the first scratting and add 1 level scoop of Ascorbic Acid. Fill the rest of scratter funnel with apple from the first scratting. Turn the handle as before and collect contents in the trug.

Pressing

Lift the cranking bar up and place the pressing barrel centrally on the base. Place a clean washing up bowl under the draining spout. Line the barrel with a straining bag and fill the bag with scratted apple. Pack the apple down lightly by hand, ensuring the top surface is level. Try not to spill apple out of the barrel. Fold the liner over the apple and place the pressing plate on top. Ensure that it fits in centrally and sits level. Place the smaller pressing plate on top and lower the cranking bar – fix the bar in place with the pin provided. Ensure that the barrel, screw etc are lined up vertically, otherwise the pressure plate can slip sideways and will then jam and possibly crack.

Engage the cranking handle in the bar with the drop rod in the relevant slot. According to the orientation of the drop rod, the handle can be rotated around the barrel, or cranked backwards and forwards.

Colwall Orchard Group: Safe Way of Working - SWOW09 - Apple Juicing Lines

Work the handle slowly until the apple settles and juice starts to run, then continue to turn the handle until the pressure builds up. If time permits, allow the pulp to rest for a few minutes before making a few final turns. Children are welcome to do any of this bit!

When the juice has stopped running, reverse the drop rod and turn the handle to release the pressure. Lift the cranking bar, remove the pressure plates, and extricate the lining bag of pressed pulp (best done with 2 people). Empty the pulp into the waste bag and take the juice to whoever is processing juice. Tell them if the juice is a single variety juice, or a batch for a specific member of the public, so that it can be treated accordingly.

Start again!

Processing juice

Empty the juice from the pressing lines into food grade buckets through a sieve to extricate bits. Use jugs to decant juice from the buckets into jugs to supply the caterers, containers provided by relevant members of the public or clean glass bottles. Label the bottles being sent for sale and add the type or variety of juice if relevant

Clearing up

All wooden parts of the presses must be brushed clean of apple pieces, run under clean water and placed in the open air to dry out (on no account leave any wooden parts sitting in water or juice dregs, as they will swell up and split)

Scratters must also be cleaned of apple pieces, washed down and left to dry Scratter stands should be washed down to remove sticky residues

Other materials used to process juice must be washed up and dried.

All apple pulp must be removed from the concrete and grass and placed in the builders bag.

Remaining apples, of sufficient quality, should be transferred into clean bale arm crates for storage in the Apple Packing Shed until required.