



## Heart Moulds Pilot Project 2022

Application guide and experience report  
2021-2022/2  
for apples and oranges

Our heart moulds are a purely Austrian product!

### Pilot project heart moulds 2022:

**This year we are launching our pilot project.**

For a 20% discount on the price, you as our customer promise to send us your results as a case study so we can put them on our website and use them for marketing purposes.

If you're interested, please sign up on our website at: [www.aepfelinform.at/obstbauern/](http://www.aepfelinform.at/obstbauern/)

### Benefits of the Heart Apple/Heart Orange:

- \* **Higher margin for 1 unit of Heart Apple/Heart Orange** – compared to **1 kg apple** or **1 kg orange**
- \* All Heart Apples/Heart Oranges are the same size – **no sorting required**.
- \* **Heart apples** are packaged in cellophane; they remain good for one month and don't change.
- \* **By packaging the heart-shaped fruit in cellophane**, you will also grab your customers' attention and help them feel safe in these times.

### Benefits of the heart moulds:

- \* Quick and easy assembly of the moulds on the apples/oranges
- \* Rapid picking
- \* Easy opening of the moulds
- \* Mould **material is durable and robust**: 10 years + (same material is used for ski lifts)
- \* If no hail net is available, **heart moulds act as protection from hail**
- \* See videos

### Application guide:

\***Assembling** the moulds: (see video)

You will receive the heart moulds (HM) in 5 individual parts that need to be assembled **once**. Make sure that the clasps **at the bottom of the hinge engage properly**. You can tell this is the case when the clasp sits straight on the hinge. Close the HM until they snap into place at the top of the tabs.

\***Mounting** the heart moulds on the apples/oranges: (see video)

The HM consists of **2 hinged halves** that are simply wrapped around a growing apple/orange and that snap shut at the top of the moulds **with the connected hinged clasps**.

Close the HM until they **snap into place at the top of the tabs**.

\***Removing** the apples/oranges from the HM: (see video)

Drive a wedge or screwdriver under the tabs and press against the clasps like a lever, on both sides. Pull the clasps open. Use a tool of your choice to push the HM halves apart. Remove the apples/oranges.

\*Close the mould. The HM is now ready for use next year.

After use, the HM must be stored in a **dry** place (indoors) until the next harvest.

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## Experience report – apples 2021:

For the varieties Golden Delicious, Jonagold and Idared, we began mounting the moulds on the fruit at the beginning of July. Red apples redden normally in the HM.

### Follow the 3-point plan:

1.) **Heart moulds** are size 75+. **Fruit must reach the size of 75+**, so thin out the fruit accordingly.

**Ensure you mount the HM early enough.** For us, the ideal time to start was in early July, when the fruit diameter was 30 mm.

2.) **Earwigs** like to look for shelter in the HM. This soils the fruit, i.e. the earwigs damage the fruit. Please contact **your fruit-growing consultant in advance for information** in order to take the relevant **measures**.

3.) Please ensure that the HM are in the shade for half of the day to avoid getting burned by the sun. **Do not** hang the HM on fruit that is exposed to full sunshine all day long.

Out of a good 5,000 apples, 9 were affected by sunburn.

\* Ideally, mount the HM in the middle area of the tree.

\* The HM have 2 holes at the tip for water to escape from.

### Harvesting Heart Apples/Heart Oranges:

Heart Apples are picked **in accordance with standards for storage in controlled atmosphere**.

Heart Apples and Heart Oranges must have grown fully in the HM.

They must be grown all the way down into the tip (you can see this from outside) and into the round parts at the top (best judged when no water droplets are visible).

If possible, wait for another couple of days. **Only then should you pick the Heart Apples/Heart Oranges! The fruit is picked with no loss of time while still in the HM.**

### Storing the Heart Apples (our test results):

Store the Heart Apples **in their moulds**. Remove the Heart Apples from the HM **only before sale**.

Storage until the beginning of March: 90% of the Heart Apples in the cold-storage room were fine, whereas 99.9% of the Heart Apples in the membrane crates were fine.

**Storing the Heart Oranges:** Handle the Heart Oranges in accordance with your standards.

### Sale and shelf life of the Heart Apples:

Due to the pandemic, we were required to take certain measures to ensure that the apples were **sold in a safe environment**. Put the Heart Apples into a cellophane bag. The big advantage of this is that the Heart Apples remain good for about one month and don't change.

### Summary:

\* Assemble heart moulds correctly once

\* **Use varieties that easily reach 75+, or thin out the fruit accordingly!**

\* **Pick apples in accordance with standards for storage in a controlled atmosphere**

\* Take earwig measures at an early stage! **This is very important!**

\* Hang the heart moulds on the apples and oranges in ample time

\* Consider frost and drought

\* Partial shade is a **must!**

\* Mount moulds in the middle area of the tree

\* **Be patient!** The apples must grow all the way down into the mould, and no more water droplets must be visible! You have only **one** harvest.

\* Store moulds in a dry place.

**If you follow these points, you will be successful!**