

Tomato Brown Rugose Fruit Virus (ToBRFV)



Fern shaped leaves



Mosaic pattern on leaves



Bulging of leaves



Mosaic and chlorotic leaves



Thin and elongated heads



Wilting, chlorotic & dying plant



Brown patches on fruits



Rugose symptoms on fruits



Necrotic stalk, petiole & calyx



Fruits remain orange (right)



Yellowing spots on fruits



Marbled fruits

The main precautions we take!



- We make an **appointment** for each planned visit, preferably first thing in the morning.
- **We do not visit other greenhouses** with known or suspected infections in the same day prior to appointment.



- Our visits should always be **supervised** by a staff member assigned by you.
- We strictly follow **all your hygiene precautions**.
- Please accompany us in the crop; we will only visit areas that **require attention**.



- **We will not touch** the plants unless absolutely necessary.
- **We avoid** lines that are infected or suspected of being infected.



- At all times, we will wear a **new (unopened) disposable** full body overall, plus hair net, gloves and shoe covers).
- **We dispose** of protective clothing in situ immediately after each visit in a rubbish bin.



- **We disinfect** hands and shoes properly with an effective anti-virus disinfectant before and after entering the crop and when moving between areas (crop areas, warehouse, packing line, offices, canteen, toilet...).
- **We clean and disinfect** any **equipment** that must enter the crop.



- **We will not bring** potential sources of contamination inside the greenhouse (phone, tablet, notebook, camera, loupe, pen, jewellery).
- We will ask to **borrow** items where possible (lens, tablet, camera, etc.)
- **We will not remove** anything from the greenhouse (plant material, boxes, packaging).
- If we need to take plant samples, we use unopened **plastic zip bags** and observe them outside.



- We will ask you to provide us a **locker** or lockable box to store the materials and tools that we will use only in your greenhouse.

The main precautions you should take!



- Get trained on how to implement **effective hygiene measures**.
- Learn to recognize ToBRFV **symptoms** and teach your staff to report suspected plants.
- Make people aware of the **importance** of good hygiene practice.



- Use **separate tools** for each crop line.
- **Disinfect the tools** with an effective anti-virus disinfectant before and after each use.



- Only **necessary visitors** must enter the greenhouse, ensure you are prepared to receive them.
- **Accompany** visitors and only bring them to areas of the crop that require attention.
- Ensure **visitors** are aware of, and fully adhere to all hygiene rules.



- **Wear gloves** when handling plants.
- Enter the lines that are infected (or potentially infected) **last thing in the day**.
- Work only on your **assigned crop area**.



- **Wear clean clothing**, new or disinfected overalls, boots and gloves.
- **Discard** disposable protective clothing immediately after entering infected areas.
- Put used clothing in a **sealed bag** to bring it for washing.



- **Disinfect** hands and shoes properly with an effective anti-virus disinfectant before and after entering the crop and when moving between areas (crop areas, warehouse, packing line, offices, canteen, toilet...).
- **Clean glasses** with an effective disinfectant.



- **Don't bring** anything into the greenhouse that has been in contact with the outside (phone, tablet, notebook, camera, magnifier, pen, jewellery).
- **Remove and destroy** infected plants, debris and contaminated substrates according to the recommended instructions.