

Growing Tips

Touché Tomato

Commercially introduced just over a year ago, the Touché tomato offers glasshouse growers a superb beefsteak variety, combining an intermediate powdery mildew resistance with the flexibility of grafted or non-grafted growing options. Touché is a vigorous variety, with high yield potential, typically producing large, slightly ribbed fruits of 250-300 grams. This variety has shown the ability to withstand harsh summer conditions in Ontario with a good quality fruit. It has also performed well in dry climates.

This tomato is not jointless, and is classified as an indeterminate, loose-harvest variety.

Early season tips

Especially in the beginning of the crop, it's important to control the vigor by removing a leaf out from the top of the plant on a weekly base, to make sure that the plant will work on its fruits enough. Throughout the duration of the crop, continue removing a leaf from the top as needed, to keep this crop open, as the leaves can become quite large. If the plant becomes too vegetative, this can lead to decreased fruit size.

Also during the early season, the climate should be managed to induce generative growth. Good pre-nights, with an evening temperature drop, will help achieve this.

Individual results may vary, and performance may vary from location to location and from year to year. The information provided in this communication may not be an indicator of results you may obtain as local growing, soil and weather conditions may vary. Growers should evaluate data from multiple locations and years whenever possible.

The recommendations in this article are based upon field observations and feedback received from a limited number of growers and geographies. These recommendations should be considered as one reference point and should not be substituted for the professional opinion of agronomists, entomologists or other relevant experts evaluating specific conditions.

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TYPE

Large red beefsteak tomato

USE

High-tech greenhouses, year-round

DISEASE RESISTANCES

HR: ToMV:0-2/Ff:A-E/Fol:0,1/For/Va:1/Vd:1*

IR: On*



POWDERY MILDEW RESISTANCE

Powdery Mildew is one of the most devastating diseases affecting tomato cultivation worldwide.¹ A good disease package can go a long way for tomato varieties, and Touché meets the criteria for intermediate resistance to powdery mildew. In the event of an outbreak, early disease detection is crucial.² Because of its strong vigor, it generally doesn't require grafting to resistant rootstock. However, for growers using long crop cycles, Touché provides the flexibility of growing well in grafted systems.

FERTILIZER MANAGEMENT

For growers who take a grafted approach, rootstocks chosen for high nitrogen acquisition ability may allow for decreased fertilizer application without reducing yields, minimizing environmental nitrate pollution.³ Controlling nitrogen levels is especially important early in the season, when growers want to encourage generative rather than vegetative growth. Contact a De Ruiter representative to discuss the most efficient and effective fertilizer recommendation for your operation.

ARTIFICIAL LIGHT, YIELD AND SHELF LIFE

Touché has experienced encouraging results during preliminary testing under [artificial light](#) conditions, which can offer growers a measure of control in unpredictable lighting and temperature conditions. The availability of artificial lighting can also help growers respond rapidly to increased market demand.

The variety has higher yield potential when compared to Torero and is known for its high quality fruit retention early in the season. Overall, its shelf life is also quite strong, delivering results that are comparable to other industry leading varieties.

GRAFTING CRITERIA

When choosing a grafted approach, growers should select either a Maxifort or DRO138TX rootstock, being certain to pinch the graft. Pinching on the second true leaf is advised.

Other factors that would impact the decision to graft include the type of substrate used, and the amount of carbon dioxide per hectare. Regardless of whether or not you choose a grafted or non-grafted approach, Touché can be a top performer.

KEY TO DISEASE RESISTANCE

ToMV

Tomato mosaic virus

Ff

Leaf mold (*Fulvia fulva*)

Fol

Fusarium wilt (*Fusarium oxysporum* f. sp. lycopersici)

For

Fusarium oxysporum f. sp. radicle-lycopersici)

Va/Vd

Verticillium wilt (*Verticillium albo-atrum* / *Verticillium dahliae*)

On

Powdery mildew (*Oidium neolycopersicum*
[ex *Oidium lycopersicum*])

*HR — HIGH RESISTANCE

The ability of a plant variety to highly restrict the activities of a specific pathogen or insect pest and/or to restrict the symptoms and signs of a disease, when compared to susceptible varieties. Varieties with high resistance may exhibit some symptoms when specified pathogen or pest pressure is severe. New and/or atypical strains of the specific pathogen or pest may overcome the resistance.

*IR — INTERMEDIATE RESISTANCE

The ability of a plant variety to restrict the growth and development of the specified pest or pathogen, but may exhibit greater range of symptoms compared to varieties with high resistance. Intermediate Resistant plant varieties will show less severe symptoms or damage than susceptible plant varieties when grown under similar environmental conditions and/or pest or pathogen pressure.

¹ http://www.actahort.org/books/1159/1159_17.htm

² Patrick Wspanialy, Medhat Moussa, "Early powdery mildew detection system for application in greenhouse automation" *Computers and Electronics in Agriculture*, Volume 127, 2016, Pages 487-494, ISSN 0168-1699
<https://doi.org/10.1016/j.compag.2016.06.027>
<http://www.sciencedirect.com/science/article/pii/S0168169916304318>

³ M.J. Asins, A. Albacete, C. Martinez-Andujar, F. Pérez-Alfocea, I.C. Dodd, E.A. Carbonell, J.A. Dieleman, "Genetic analysis of rootstock-mediated nitrogen (N) uptake and root-to-shoot signalling at contrasting availabilities in tomato" *Plant Science*, Volume 263, 2017, Pages 94-106, ISSN 0168-9452
<https://doi.org/10.1016/j.plantsci.2017.06.012>
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