

## Cultural sheet: Pot Tomato Heartbreakers F1 Dora &amp; Vita series

<b>Species</b>	
Variety Name	Heartbreakers F1 Vita Red; (35-45 cm tall) F1 Dora Red (30-35 cm tall)
Variety number	410-080; 410-070
Species	Lycopersicum esculentum
Trade name species	(Pot/Determinate) Tomato
Type	Annual
Family	Solanum
Seed weight	1,8-3,0 gram / 1000 sds depending on seed lot and variety
EU List Variety names	PHBT410080 (Vita Red) PHBD410070 (Dora Red)
Average germination	85-95%
<b>Young Plant</b>	
Nr of Seeds/plug	1 for plug size 1,5-3 cm
Germination days	1-2 days* (biological des-infected seeds can take 2 days more)
Germination temp.	18°-21°C – 64°-70°F Covered and high humidity, no light needed
Grow on days	14-21 days
Grow on temp.	16°-21°C – 61°-70°F
Min. Grow on temp.	16°C – 61°F (This enlarges the Grow on days period)
Max. Grow on temp.	35°C – 95°F This shortens the Grow on days period, encourage stretching internodes
Optimal D/N temp.	21°C/70°F -18°C/64°F
Soil for sowing	Sowing soil with good drainage, EC 1,5 PH 5,8-6,5
Soil for sowing covering	Vermiculite / soil with open structure /app. 2-3 mm thick
Fertilisation in the plug	2,5 EC with each watering, NPK 15-10-15 and micro elements
Ready to transplant	Full rooted plug with short internodes. Small young flower could be visible
Attention points during young plant growing	Reduce the humidity soon after germination to 70%. This prevents stretching of the hypocotyl. For pot tomatoes stretching is not appreciated. The 1-2 week period after cotyledon expansion is the temperature sensitive period, defining when the first bunch shows. Low night temperature exposure (10-15°C) of seedlings, in contrast to day temperatures at 18°-21°C /64°-70°F during this period promotes the initiation and number of flowers (bunches) on the plant, reduces the internodes length and the number of leaf's preceding the first flower bunch. Long days (16 hrs) under relative low light densities increase the dry weight production with 100% compared to short day 8 hrs after 6 weeks from sowing
<b>Finish for grower</b>	
Potting soil	Standard soil with good drainage and also good water storage capabilities EC 2,5 PH 5,8-6,5
Pot-size	15-17cm 6-7" optimal 15 cm/6"
Plugs per pot	1
Indoor	Final distance indoor 25 cm/10" x 25 cm/10" (16 plts/m2)
Spacing indoor:	Space the plants when the leaf's are reaching each other.
Outdoor in open soil	Planting distance 30 cm/12" x 30 cm/12"
Planting soil outdoor	Standard soil with good drainage and also good water storage capabilities EC 1,5 PH 5,8-6,5
Min. Grow on temp.	18°C – 61°F (This enlarges the Grow on days period)
Ideal grow on temp.	21°C-25°C– 70°-77°F
Optimal D/N temp.	23°C/77°F -18°C/64°F
Frost	Plants cannot stand frost.
Watering	Regularly for continues growth, keep the soil moist Watering with minimal. 2,5 EC keeps tomatoes healthy
Crop time to saleable	10-12 weeks after planting, the first bunch starts show colour.
Attention points during plant growing	<ul style="list-style-type: none"> <li>Plants are bred for showing attractive fruits with low maintenance. They produce long bunches with 14-183 fruits per bunch</li> </ul>

	<ul style="list-style-type: none"> <li>Put 2-3 sticks around the central stem of the plant to keep the plant in balance when fruits are growing.</li> <li>High temperatures (27°C average D/N) induce pollen infertility/no fruit set. Within the 21-27°C range a diurnal fluctuation of at least 5-6°C promotes good pollen fertility.</li> <li>Night temperatures of between 16-20°C are ideal. Temperatures below 13°C severely affect the pollination of most cultivars.</li> <li>Insects, especially bees and bumble bees, support fruit set on tomatoes</li> <li>Tomato plants have a high fertilization need. When the EC is too low, the leaf's can turn yellow when the fruits are colouring. This also reduces the taste of the fruit.</li> <li>When the flowers show, increase the EC in to 3-4, to keep the fertilisation in the pot high enough. (EC in the pot can go up to 7-9)</li> <li>Tomato plants/leaf's can be made sturdier by spraying (MgSO<sub>4</sub> -bitter salt and Dipotassium-sulphite (K<sub>2</sub>SO<sub>3</sub>)) solutions on the plants (possible combined with other chemicals which need to be used). This has a positive effect on the leaf size and colour</li> <li>Clay in the soil will stabilize fertilization variation and reduce stretching. 2-5% is advisable, can be increased to 10%. Potassium-phosphate (MKPO<sub>3</sub>) in a concentration of 0,1% improves the quality of tomato plants. This is a good method against phytophthora. For all tomatoes this can lead to a significant reduction of failures.</li> </ul>
--	--

Consumer use	
Use	Compact snack tomato for outdoor use in patio and balcony pots Compact snack tomato for kids garden
Unique specifications	<ul style="list-style-type: none"> <li>Fruit weight; depends on culture, from 8-15 gr/fruit.</li> <li>High temperatures (27°C average D/N) induce pollen infertility/no fruit set. Within the 21-27°C range a diurnal fluctuation of at least 5-6°C promotes good pollen fertility.</li> <li>Night temperatures of between 16-20°C are ideal. Temperatures below 13°C severely affect the pollination of most cultivars.</li> <li>Insects, especially bees and bumble bees, support fruit set on tomatoes</li> <li>Tomato plants have a high fertilization need. After germination watering with 2,5 EC with macro and micro elements supports growth.</li> <li>Clay in the soil will stabilize fertilization variation</li> </ul>

Pictures	
----------	--



2,5 cm/1" plug



F1 Vita 17 cm pot

F1 Dora 17 cm pot