

GiSela®17 Gi 31817(S)

the most vigorous, with suitability for replanting

The dwarfing cherry rootstock GiSela®17 Gi 31817(S)

Lineage	<i>P. canescens</i> x <i>P. avium</i> Wild Cherry
Selection	Breeding program at the University of Giessen
Variety Name	Gi 31817 ^(S)
Variety Rights Holder	Consortium Deutscher Baumschulen GmbH

GiSela®17 Gi 31817(S) induces the strongest growth of all GiSela® types. The trees remain 20 - 30 % smaller than on „F12/1“ and come into yield much earlier. Due to its good tolerance and tree health, GiSela®17 Gi 31817(S) is the alternative to „Maxma 14“.

In trials in North America and Germany, GiSela®17 Gi 31817(S) achieved good fruit qualities combined with good and, above all, early yields. Thanks to the parent species *Prunus canescens* and *Prunus avium*, the rootstock is very robust and suitable for replanting.

In South America, Gisela®17 Gi 31817(S) has stood out for its drought tolerance.

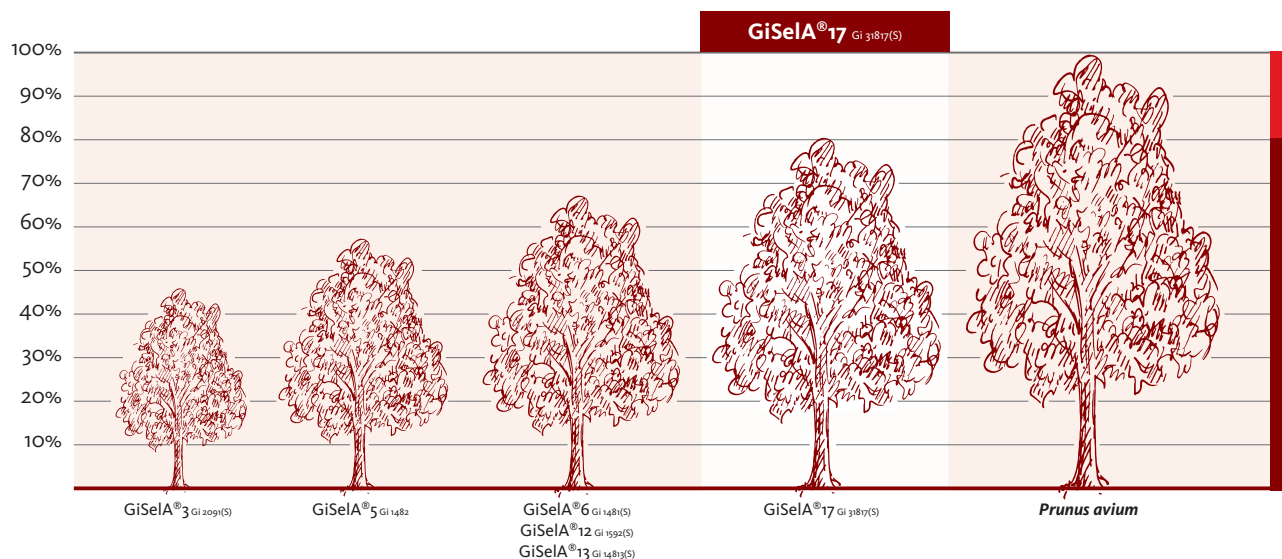
The risk of overcropping is significantly lower than with GiSela®5 Gi 1482 or 6 Gi 1481(S), making GiSela®17 Gi 31817(S) ideally suited for combination with self-fertile varieties. Furthermore, there is tolerance to the viruses PDV and PNRSV.

GiSela®17 Gi 31817(S) is less demanding than GiSela®5 Gi 1482 in terms of soil and climatic conditions and intensity of cultivation measures.“

Overview of GiSela® varieties

- **GiSela®3** Gi 2091(S) the rootstock for the specialist in very intensive sweet cherry cultivation
- **GiSela®5** Gi 1482 the most important dwarfing cherry rootstock, standard in Central Europe
- **GiSela®6** Gi 1481(S) the high-yielding, growth-reducing alternative to GiSela®5 Gi 1482
- **GiSela®12** Gi 1592(S) the alternative to GiSela®6 Gi 1481(S)
- **GiSela®13** Gi 14813(S) the undemanding sister
- **GiSela®17** Gi 31817(S) the most vigorous, with suitability for replanting

Overview of vigor induction vs. *Prunus avium*



(S) = Plant Variety Protection, Propagation prohibited

the most vigorous, with suitability for replanting

Special characteristics

Growth rate induction	Vs. <i>Prunus avium</i> 75-85% of „F12/1“ and/or „Mazzard“; Strongest GiSela® clone Strong growth in the juvenile phase, induced by in vitro propagation, weakens to the level typical of the variety with the onset of production
Anchorage / Root system	Well anchored cultivable without support
Succering tendency	No succering
Grafting point/unit	Smooth, hardly any overwhelm

Yield

Yielding potential	High
Precocity	Trees come into yield much earlier than trees on <i>Prunus avium</i> rootstocks
Yield generation	Produces early yields; first yields from the 2nd leaf / full yields from the 4th/5th leaf onwards
Fruit size	Good to very good; no negative influence by the rootstock; the decisive factor is crop management, in particular early, regular pruning, as well as sufficient fertilization and irrigation/fertigation. Fruits remain small if too little pruning is done and new growth on weak rootstocks is then too low. Important: leaf-to-fruit ratio 3 to 1
Combination with very fertile / self-fertile varieties	Very recommended with good size

Site - Climate

Soil quality requirements	Very broad adaptation, undemanding GiSela® rootstock; problem-free on almost all soils as well as in replanting
Geographical region	Temperate as well as dry hot regions
Climate requirements	Low demands; good drought tolerance; can easily tolerate temperatures above 40°C
Winterhardiness	Good to very good

Cultural management

Demands on culture management	Simple, the GiSela® starter rootstock ; regular pruning a must to produce sufficient shoot length and leaf mass to good fruit size each year; ideal leaf-to-fruit ratio 3 to 1
Varietal suitability	Sweet cherries; also suitable for sour cherries; no incompatibilities
Suitability / Cultivation intensity	Lower fertility; advantage: the combination with self-fertile varieties does not lead to overcropping, therefore good fruit sizes, Ideal for replanting
Planting density	Medium, row spacing 4.0 m to 5.0 m in row 2.5 m to 3.5 m distance depending on variety
Irrigation demand (In relation to temperate Central European climate 600-700mm annual precipitation)	Not necessary, but beneficial
Fertilization / Fertigation	Depending on the soil sample, 40-60 kg total N/ha/year required for established trees from the 5-6 standing year; depending on the soil sample, 30-50 kg N/ha divided as early basic fertilization already before flowering and 10-20 kg N/ha as follow-up fertilization ideally as fertigation until harvest; generally higher fertilizer applications than for <i>Prunus avium</i>
Covered cultivation	Not appropriate
Replanting	Well suited

Disease response / Tolerances

PDV / PNRSV	Tolerant
<i>Monilia</i>	Tolerant
<i>Pseudomonas</i>	Depending on variety and weather conditions
<i>Agrobacterium</i>	Due to in vitro propagation, all rootstocks are EU certified and disease free; <i>Agrobacterium</i> infection comes from contaminated soils