CDB presents a new brand identity and expands its range with new dwarfing rootstocks for fruit trees

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New brand identity of the CDB

The Consortium Deutscher Baumschulen (CDB) has revised its brand identity and presents itself with an umbrella brand strategy in a new visual appearance. With the new brand identity under the CDB umbrella brand and a clear reference to a common core, the Consortium of German Nurseries (= Deutscher Baumschulen) has a uniform brand identity. The company aims to achieve greater recognition and brand awareness with the new brand identity. It is also intended to underline the company's expertise and professionalism and strengthen the trust of customers at home and abroad.

In addition to licensing and sales under the CDB umbrella brand, the CDB offers its customers high-quality advice on cultivation, technical and varietal consultancy. This support contributes to the fact that the CDB and its licensees enjoy a high level of brand awareness worldwide, particularly with GiSelA®, the market leader for cherry rootstocks.

GiSelA® Rootstocks – dwarfing rootstocks for cherries

GiSelA® rootstocks are dwarfing rootstocks that are particularly suitable for intensive sweet cherry cultivation in temperate climates. They emerged from a breeding program at the University of Giessen and offer a decisive advantage: an early start to yield. The first yields can be achieved as early as the second year, and full yields are possible from the fourth year. The high productivity is maintained over many years.

The GiSelA® family includes different varieties, the most important of which are GiSelA®5 Gi 1482(PVP) and 6 Gi 1481(PVP). However, GiSelA®12 Gi 1592(PVP), 13 Gi 14813(PVP) and 17 Gi 31817(PVP) have also been added in recent years. GiSelA®3 Gi 2091(PVP) plays a less important role.

The rootstocks have varying degrees of growth reduction from variety to variety and flat branch angles, which induce a broad habit. They are also very hardy and tolerant to pollen-borne viruses. No tendency to succering with good compatibility to varieties.

Variety overview

- GiSelA[®]5 Gi 1482^(PVP), the most important dwarfing cherry rootstock, standard in Central Europe
- GiSelA[®]6 Gi 1481^(PVP), the high-yielding, semi- dwarfing alternative to GiSelA[®] 5
- \bullet GiSelA $^{@}12$ Gi $1592^{(PVP)},$ the alternative to GiSelA $^{@}6$
- GiSelA®13 Gi 14813^(PVP), the undemanding sister
- GiSelA®17 Gi 31817^(PVP), the most vigorest, suitable for replanting
- GiSelA®3 Gi 2091(PVP), the rootstock for high-density sweet cherry orchards

The selection of the suitable rootstock variety can or should be made depending on the soil, the variety and the desired cultivation intensity. In vitro propagation leads to certified uniform young plant

material of high quality and initially vigorous growth, which slows down to the typical varietal level when yields begin. All GiSelA® rootstocks can also be used for sour cherry combinations!

CDB is expanding its range with Refia[®] and Malia[®]: Two new rootstocks for fruit trees

Refia® Rootstocks – Pear decline resistant Pyrus rootstocks

The *Pyrus* rootstocks Refia[®]ViruTherm-1^(PVP) and ViruTherm-2(^{PVP)} are resistant to pear decline and were developed through selection breeding of phytoplasma-resistant pear rootstocks. They show no pH-induced chlorosis and are compatible with all pear varieties. The selection was done by Petruschke in a trial at KOB Bavendorf in 2014 and was tested by LTZ Augustenberg in Karlsruhe. Both varieties have received national (German) plant variety protection, which is now being extended to Community plant variety protection. The CDB has been granted exclusive worldwide propagation and distribution rights.

Refia®ViruTherm-1^(PVP) is characterized by a fine root system that is fibrous and suitable for dry, sandy or gravelly sites. The variety is also lime-tolerant and can be used on acidic soils (up to pH 5.5). The Pyrus rootstock is also tolerant to high temperatures and has very good winter hardiness (-20 °C). Its vigor is about 20% weaker than seedlings and roughly comparable to BA29/C.

Refia®ViruTherm-2^(PVP) is another *Pyrus* rootstock that is suitable for dry, sandy or gravelly sites. This variety is also lime-tolerant and suitable for Central European climates. Compared to a seedling, the growth vigor is approx. 10 % weaker. The leaves of the rootstock are roundish and heart-shaped and have few, strong roots. The variety is very hardy (-20 °C). In contrast to Refia®ViruTherm-1^(PVP), Refia®ViruTherm-2^(PVP) is a *Pyrus communis* rootstock.

Malia® Rootstocks – proliferation resistant apple rootstock

The variety Malia[®] D 2212^(PVP) originated in the 1970s from a breeding program for apple rootstocks at the former Federal Research Institute in Ahrensburg/Germany.

The goal was to breed homogeneous, disease-tolerant rootstocks that could be propagated generatively by crossing the original species/varieties. The parent species/varieties came from the original home of the apple.

Hanna Schmidt, later one of the breeders of the Giessen breeding program, from which the GiSelA® cherry rootstocks also originate, played a key role in breeding.

It is the only apple rootstock with resistance to apple proliferation and the fungus *Athelia rolfsii*. Its vigor is comparable to that of the M 7 rootstock, but certainly without a tendency to succering. The variety has a good anchorage, frost-hardy down to -25 °C and suitable for all soil types.

It is characterized by a high yield potential, good fruit size and color. Compared to other rootstocks, it has predominantly stronger roots and fewer fine roots. In addition, there are no compatibility problems, which has been proven by the successful testing of 300 different varieties.

Malia[®] D 2212^(PVP) is particularly suitable for integrated cultivation due to its resistance to apple proliferation and Athelia rolfsii, thus reducing the use of pesticides. The rootstock is adapted to the Central European climate and can also be used in colder regions

However, it is particularly recommended for columnar varieties due to its stability. Malia[®] D 2212^(PVP) is used successfully for mothergardens (reception of phytoplasmafree budwood) as well as for half trunks and in cider fruit cultivation.

The Julius Kuehn Institute (JKI) owns the Community Plant Variety Rights and the CDB has an exclusive worldwide license for this variety. Since in vitro propagations were successful at the LfP Stuttgart in 2007, extensive tests were carried out at the LTZ Augustenberg from 2010 onwards in order to precisely test the quality and properties of the variety in fruit growing.

The variety Malia[®] D 2212^(PVP) thus offers an important alternative to conventional apple rootstocks and contributes to making fruit growing more sustainable and environmentally friendly

In addition to the well-known $GiSelA^{\otimes}$ - rootstocks and the two new trademarks $Refia^{\otimes}$ and $Malia^{\otimes}$ the CDB has other successful varieties in its program.

Wavit® Prudom(PVP): The successful and innovative rootstock for plums and apricots

Wavit[®] Prudom^(PVP) is an innovative and successful rootstock that has been in the company's program since 2003. It is a vegetatively propagated type that was selected by the Schreiber nursery in Austria due to its outstanding orcharding properties. It combines the well-known positive characteristics of "Wangenheims Sämling" with good fruit size and the advantages of a clonal rootstock (excellent uniformity in the nursery and in the orchard).

Wavit[®] Prudom^(PVP) is suitable as a plum and apricot rootstock and has many positive characteristics, such as good anchorage, a fine-fibered root system, very good compatibility with various plum and apricot varieties and a higher tolerance to Pseudomonas infestation. It is also more tolerant to ESFY infestation in certain variety combinations. Delayed incompatibility can occur with Japanese plums!

About the CDB

The Consortium Deutscher Baumschulen (CDB) is an association of nine German nurseries who are specialized in dendro- rootstock production. The CDB is active in growing markets in the B2B environment and has a good global network with currently 28 licensees in order to be able to offer its products and services.

The Consortium's goals include advising the nursery industry, improving product quality and developing technologies and innovations in the field of grafting rootstocks for dwarfing fruit trees. In close cooperation with our licensees, we organize the practical evaluation of extensive breeding material, the worldwide introduction of the best varieties into modern fruit growing, as well as production and distribution.

The following trademarks belong to the CDB:

- GiSelA[®] dwarfing rootstocks for cherries
- Wavit® rootstocks for apricots and plums
- Refia® Pear decline resistant *Pyrus* rootstocks
- $\bullet \ Malia^{\$} proliferation \ resistant \ apple-rootstocks \\$
- Pyrodwarf® calcium-tolerant *Pyrus* rootstocks
- PiKU® cherry rootstocks for sandy soils

The CDB rootstocks have significant advantages to conventional rootstocks:

- The trees remain smaller and can be planted more densely
- Due to the close planting, cultivation in fruit walls is possible or significantly simplified
- Modern, small trees and fruitwall- trained orchards increase working and in particular harvesting efficiency by 30-40%.
- This makes netting and/or covering possible or much easier
- These modern cultivation systems provide additional crop security
- Very early initial yields followed by rapid full yields ensure a quick return on investments!

Please do not hesitate to contact us for further information.

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