

Pflanzenvermehrung is a medium-sized family business specialized in the production and marketing of strawberry and lily of the valley seedlings. For more than 30 years, the focus of our production is propagating high quality strawberry frigo young plants.

Vast experience in strawberry multiplication and a young and innovative team are our strengths. Our customers appreciate the quality and our fair and simple handling.

We set great value upon quality. Self-developed technology plays an important role in our operation.

We cultivate all varieties offered by us for our own fruit production and test their suitability for miscellaneous marketing channels as well as cultivation methods. **Our strawberry plants are the guarantee for top quality!** We see ourselves as partners of our customers and respond flexibly to your needs.



Get a little insight into our work:

To improve the soil structure and reduce the amount of nematodes, tagetes are often grown one year before the propagation (1).

At the beginning of spring, the ground layering elite mother plants are set to the seedling production. A field irrigation improves the growth (2).

The weed control happens largely mechanical by hand or chipper. Regular fungicide and foliar fertilizer treatments strengthen the healthy state of the plants (3).

The layers must be brought by hand to a position that makes it easier for the plants to grow and that provides the largest possible growing space (4).

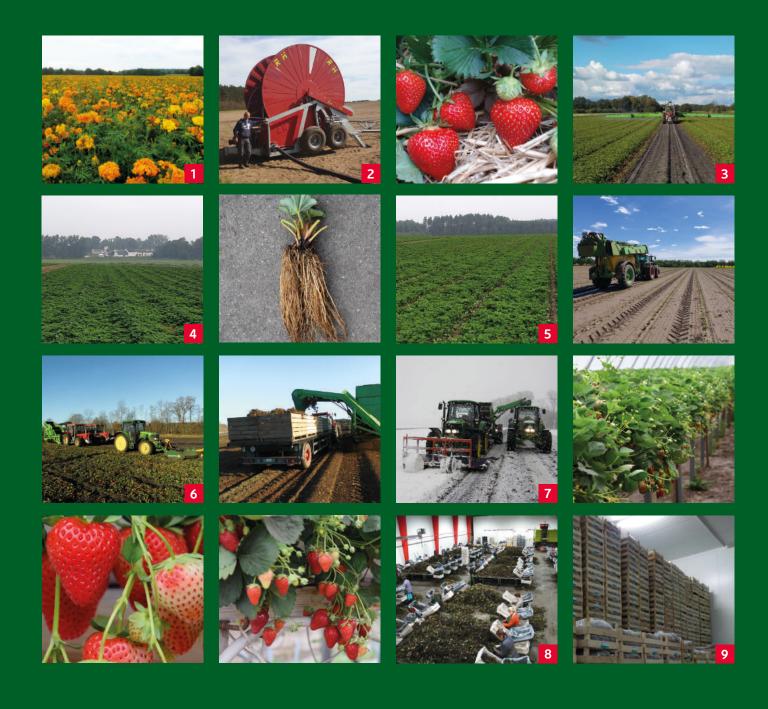
As soon as the root system of the young plants is sufficiently strong, the mother plants are milled. As a result, the young plants are getting more light to save enough assimilates (5).

The formation of uniform and strong young plants requires sure instincts: The leaves have to be cut back and the stolons have to be divided at the right time (6).

The young plants from our propagation are digged up by machine. Our specially developed technology also enables harvesting under difficult weather conditions (7).

The uniform sorting and packaging of young plants is managed by trained and experienced regional workers and from abroad (8).

The plants are stored at -2 $^{\circ}$ C in our cold stores until delivery or pick up by the customer (9).



very early



Cultivation





Selling ____



Duchesse ®

Protected variety, Variety owner Planasa, ES

Fruit: light to medium red, sweet and tasty

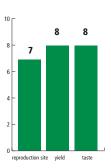
strawberries, good shelf life, shiny fruits

Picking date: 2-3 days before Magnum

Plant: upright plant habit, therefore easy

to pick, requires wide row distance, tolerant to leaf diseases, less susceptible to rot, very high yield, safe and high flower induction even in Northern latitudes, needs more cold hours, similar

to "Sonata"



Protected variety,

Variety owner H. Frantz, DE

very early



Cultivation







Selling





Ines

Fruit: middle to big sized, shiny red and

glossy fruits which darken a little, **very**

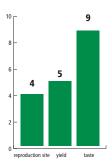
aromatic flavour

Picking date: 2-3 days before Magnum **Plant:** open and upright habit, s

open and upright habit, susceptible to Crown Rot, but resistant to Mildew, early

flowering, Ines likes slightly acid sites

with sufficient micronutrients



very early







MAR 118Early, uniform shaped fruits

Protected variety, Variety owner Earth Market, CH

Fruit: uniformly large, bright red, shiny fruits

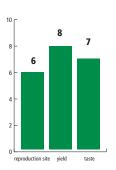
that retain their gloss. Good shelf life, fresh sweet taste with high brix values.

Fruits do not darken

Picking date: 2 days after Flair, but earlier than Clery **Plant:** MAR 118 has an open habit, with long,

strong flower trusses. High picking rates can be achieved due to a compact harvesting window and a clear plant habit. The plants seem to be leaf healthy and are vigorous. Cold hour requirement:

850h.



A very early and attractive new strawberry selection!

MAR 118 showed very good results in experimental cultivation. It has so far been convincing in early cultivation in raised beds and plastic tunnels, as well as in early substrate culture.

Total yield and class 1 percentage are higher than with Flair. Fruits have a high Shelf Life and do not darken after harvest.

Due to a compact harvest window, high picking rates can be realised.

Cultivation











Magnum

the early premium strawberry

Protected variety, Variety owner Earth Market, CH

middle to large sized, glossy red colored Fruit:

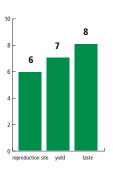
> berries with an aromatic taste, high sugar level, good shelf life, high picking

rates and high yield

Picking date: 5-9 days before Sonata

Plant: medium growth, robust, open habit with upright leaf position, sensitive to

> powdery mildew, forcing in plastic tunnel is possible, very good results in substrate







Very good taste, high yield and good shelf life are only some of Magnums convincing arguments. With those characteristics, Magnum is interesting for direct sellers and wholesale traders.

Due to an open habit and upright leafs, high picking rates can be realised.

Magnum is a semi-early variety which reacts strongly on forcing. The flower peduncles are covered under the leafs and well protected against spring frost.

Magnum is showing top results in substrate culture, but it can be an alternative for all other types of cultivation like moving tunnel, double covering or normal cultivation.

Magnum is a sugar bomb with a fantastic taste!



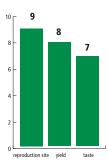
Daroyal

Protected variety, Variety owner Darbonne, FR

Fruit: red to dark red, sweet taste Picking date: 5 days before Sonata

Plant: strong growing, very vigorous,

long flower peduncles, resistant to Verticillium Wilt, suitable for organic farming and sites without crop rotation



Cultivation











early



Cultivation















Darselect

light to medium red, large fruits with Fruit:

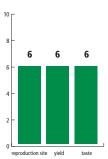
> average taste and good shelf life, sensitive to rain, but heat tolerant

Picking date: 3-5 days before Sonata

Plant: strong growth, flower peduncles are

higher than the leafs (danger of spring frost damage), high water requirement, sensitive to Crown Rot and Botrytis, susceptible to Verticillium Wilt and Mildew, vulnerable to winter frost

(covering!)



Selling

Rumba

Protected variety, Variety owner Fresh Forward Holding B.V., NL

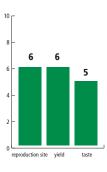
Fruit: light to medium red, uniform and glossy

shining berries, average taste

Picking date: 4-6 days before Sonata

Plant: open habit with long flower peduncles,

strong growth, hardy



Cultivation







early

Honeoye



Cultivation

৶

 \Diamond

Q

Selling



Pick Your Own

Fruit: red to dark red, medium sized, slightly

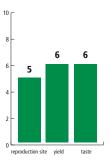
acid taste, berries are darkening (short picking intervals), good tolerance against

rain

Picking date: 4-6 days before Sonata

Plant: weak growth, flower peduncles are

covered under the leafs and protected against spring frost, susceptible to Crown Rot and Verticillium Wilt



Cultivation







Selling





MAR 109

Healthy variety for tunnels and outdoor production

Protected variety, Variety owner Earth Market, CH

Fruit: large, uniform, bright red fruits. Very

good taste, fruits with a high brix level

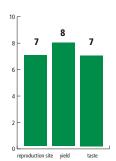
Picking date: 4-6 days before Sonata, like Honeoye +

Rumba.

850h.

Plant: Compact plants with dark green foliage,

strong flower trusses with flowers at foliage height, this also allows outdoor forcing with fleece/double covering. High picking rates due to large fruits on long flower trusses that are easy to pick. The plant seems to be healthy and is very vigorous. Requirement of cold hours:



A good alternative for fleece and double covering

MAR 109 showed very good results in trial cultivation and was particularly convincing in terms of fruit quality, yield and **high picking rates**.

Due to its vigorous growth, the variety can be used for forcing with fleece or double covering in outdoor production, on flat field and in raised beds. Resistant to mildew.

Due to the interesting ripening window, healthy growth and good taste, the variety is a good alternative to established varieties like Honeoye and Rumba.



Cultivation





Selling





Lambada

Fruit: bright red, middle-sized fruits, very

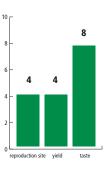
aromatic and sweet taste

Picking date: 3-5 days before Sonata

Plant: upright habit, few and long peduncles,

susceptible to Verticillium Wilt and

Mildew (plants and fruits)



Protected variety,

Variety owner Vissers, NL

middle



Cultivation



Selling





Kimberly

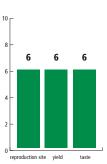
Fruit: big, medium red fruits with average

taste, good shelf life

Picking date: 2-3 days before Sonata

Plant: susceptible to Coletotriuchum and

Verticillium Wilt



middle

Deluxe

Protected variety, Variety owner Darbonne, FR



Fruit: big, shiny and round shaped fruits, good

taste, high percentage of class 1 fruits,

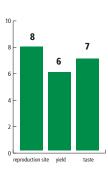
sensitive to rain

Picking date: 1-2 days before Sonata

Plant: upright habit, long peduncles, high

picking rate is possible, high yield also in the 2nd year of harvest, resistant to

Verticillium Wilt and Mildew



Cultivation







middle



Cultivation

Selling

Pick Your Own

Korona

Fruit: dark red, very sweet and soft fruits

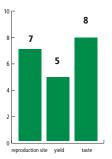
(short picking intervals), medium sized

Picking date: 0-1 days before Sonata

Plant: strong growth (late planting time); fruits

are significantly smaller in the 2nd year of harvest, so we recommend only 1 harvest per plant, susceptible to Crown

Rot



middle

Sonata

Protected variety, Variety owner Fresh Forward Holding B.V., NL

Fruit: medium red, shiny and uniform, round

shaped fruits, good taste, sensitive to

heat and rain

Picking date: dependent on location and weather

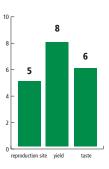
condition week 23-24 in Northern

Germany

Plant: robust, compact habit, very high yield,

susceptible to Crown Rot and Botrytis,

high need of magnesium



Cultivation













middle



Cultivation

Normal cultivation



Selling



Elegance

Uniform, glossy, elegant!

Protected variety, Variety owner East Malling Research Ltd. UK

Fruit: very uniform, beautifully shaped and

glossy brilliant red color, surpasses requirements of wholesale market, very good shelf life, rain tolerant, berries are

not darkening

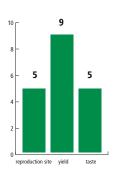
Picking date: 4 days after Sonata

Plant: upright habit, long peduncles, easy and

quick picking due to a compact picking period; **high picking rate**, very suitable

for 60-days-culture, susceptible to

powdery Mildew



middle

Cultivation



Selling







Red Himalaya (DA 64)

Low-cost, easy production

Protected variety, Variety owner Planasa, ES

Fruit: medium sized, shiny, bright red,

attractive fruits, good taste, high

percentage of class 1 fruits! Easy to pick, long flower trusses require wide row

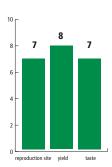
distance or raised beds

Ripening time: 4-5 days after Sonata

Pflanze: medium growth, seems to be tolerant

to soil diseases, therefore very resistant, healthy plants, 2-year cultivation is

possible.



For easy, low-cost outdoor cultivation in main season!

Red Himalaya is a new variety from Planasa's breeding programme. They have succeeded in selecting a strawberry variety for main season in Northern latitudes that is very vigorous with a high yield.

Fertilisation and plant protection measures can be reduced to a minimum with this variety.

Fruits are very attractive and easy to pick, they are more resistant to rain than other varieties and have their harvest peak slightly after Sonata.

Red Himalaya combines rain and disease tolerance with low cultivation risk, high yield and high **picking rates**.

Konia

Protected variety, Variety owner J. Putfarken, DE



Cultivation

Selling



Fruit: big, dark red and shiny, conic berries, sweet taste, tolerant to rain but

vulnerable to heat, easy to pick without

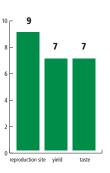
calyx (jam production)

Picking date: 3-5 days after Sonata

Plant: strong growth and intensive root system,

suitable for sites without crop rotation, long peduncles, resistant to Crown Rot and Verticillium, susceptible to Mildew,

sunburn and soft-bodied mites



middle



Cultivation



Selling



Senga

Fruit: medium sized, dark red berries with red

pulp, very sweet and aromatic taste, soft fruits, suitable for jam and juice

variety for privat gardeners and PYO

production

Picking date: 4-6 days after Sonata

Plant: strong growth, susceptible to Botrytis, tolerant against Mildew; very popular

late



Cultivation

Selling





Polka

Fruit: medium sized, shiny, very aromatic, dark

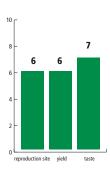
red pulp

Picking date: 5-7 days after Sonata

Plant: average growth, tolerant to Verticilium

Wilt, good winterhardines, susceptible

for Crown Rot



late



Cultivation

Normal cultivation Straw covering



Selling



Symphony

Fruit: medium sized, uniform berries with

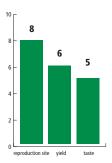
> slightly sour taste, good shelf life, rain tolerant but vulnerable to sunburn

Picking date: 8-10 days after Sonata

strong, vigorous plant, tolerant to Plant:

Phytophtora f., susceptible to soft-bodied

mites



Florence

Protected variety, Variety owner NIAB EMR, UK



red to dark red, big berries with fruity Fruit:

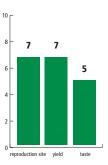
taste, that can be improved by additional

irrigation

Picking date: 7-10 days after Sonata

very healthy variety, high need of water, Plant:

> resistant to Crown Rot, Mildew and Verticillium Wilt, susceptible for sunburn



Cultivation













late

Cultivation



Selling





Malling[™] Allure

Protected variety, Variety owner NIAB EMR, UK

medium to large, shiny bright, very Fruit:

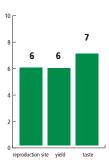
> uniform fruits, high percentage of class 1 fruits, very good taste, sensitive to rain

Picking date: between Sonata and Malwina

Plant: vigorous plant, open growth, therefore high picking rates can be realised, long

flower trusses, susceptible to powdery

mildew and sunburn



very late

Cultivation









Selling







Malwina

Protected variety, Variety owner Peter Stoppel, DE

Late and aromatic

Fruit: dark red, big berries, slightly acidic,

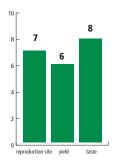
aromatic taste, high percentage of class

1 fruits

Picking date: 18-22 days after Sonata

Plant: strong growth, hardy, resistant to Crown

Rot, susceptible to Mildew



Malwina is the perfect variety for a successful conclusion of the strawberry season

Malwina is ripening significantly later than most other late-season varieties. To get a connection to mid-season varieties, it is possible to force Malwina with fleece.

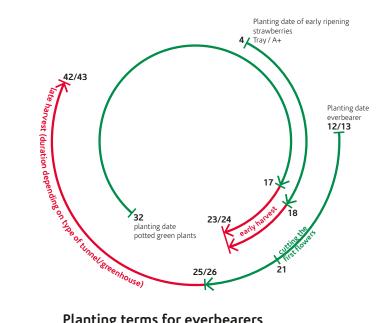
Malwina can be picked until beginning of August if plants are cultivated with straw covering (only small losses of yield). Malwina will convince your customers by its red to dark red color and its slightly acidic, but extremely aromatic taste.

Malwina plants are very vigorous. Due to that, we recommend a late planting date and if necessary a reduction of crowns after mowing in the second year of cultivation. In combination with a moderate nitrogen-fertilization, high picking rates can be realised in the second year of harvest.

Malwina is late flowering and is often affected by thrips and strawberry blossom. We recommend to control regularly while flowering.

Use of everbearing varieties in substrate

An example: substrate culture in the tunnel/greenhouse



Planting periods for early June-bearing strawberry plants

from week 4: planting of Tray- / Frigo A+ plants of early

maturing varieties (10-14 plants per running

meter)

week 32: potted fresh plants of early maturing varieties

with wintering (8-10 plants per running meter)

Start of harvest: for both options from end of April until

beginning of May, potted fresh plants tend to be

slightly earlier

End of harvest: approx. 6 weeks after first picking date

Planting terms for everbearers

week 12/13: Setting of Frigo A outdoors (growing pots), protection against spring frost with fleece cover!

> To improve of the vegetative growth, removing the first flowers until week 20/21. Flowers that come later in the year endure. As soon as there are free table tops in the greenhouse / tunnel after the first setting, set everbearers to

ensure rain protection and to implement targeted plant protection to the blossom.

Start of the harvest: about 25th June

depending on the weather conditions, variety and the system of cultivation (tunnel / heated greenhouse) until the End of the harvest:

end of October

Advantage: best possible use of the investment (tunnel / tabletop)

· top quality strawberries over a long period of time

· high yields of early frigos at beginning of harvest – easy to sell

· lower yields with everbearers over a long period, easier to position at harvest end

Disadvantage: · smooth transition between early set and remontating strawberries only possible in combination with outdoor crops

• the cultivation of everbearers requires special cultivation and work processes

Everbearers



Cultivation Selling Moving tunnel Substrate Wholesale



Sweet Ann

Plant:

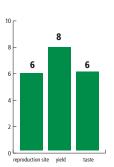
Protected variety, Variety owner Lassen Canyon Nursery, USA

For harvest extension

Fruit: average sized, dark red, shiny fruits **Ripening time:** day-neutral, intensity of the generative

phase depends on temperature, high yields in northern latitudes can be realised in both short and long day easy to pick due to upright growth wit

easy to pick due to upright growth with long, strong flower trusses, very tolerant to leaf and root diseases and fruit rots, suitable for organic cultivation, low susceptibility to thrips.



Protected summer/autumn harvest with subsequent cultivation and spring harvest possible.

Firm, rain-tolerant fruits, well suited for wholesale.

Plant develops a strong root system, which results in a good nutrient enrichment capacity, low irrigation and fertilisation intensity promotes generative growth.



We offer all our propagated varieties in the following gradings:

A- plants

(6-9 mm rhizome diameter)

Our smallest selected size, mainly used for private gardens and garden centers.

A plants

(10-14 mm rhizome diameter)

The most commonly planted grade. It is recommended to cut the flowers in the first year of culture to increase the vegetative development of the plant and thus to increase the yield in the following year.

A+ plants

 $(15-18 \, \text{mm or} > 15 \, \text{mm})$

Strawberry plants with a huge crown and a high number of induced flowers.

This grade is suitable for 60-day-cultures in open field/greenhouse.

A⁺⁺ plants

(> 18 mm)

Strongest frigo plant sorting, not available for all varieties. Often used for early planting in substrate (guarantees high yields).

For early planting in substrate or for 60-day-culture:

Waiting bed plants

(15 -18 mm oder > 18 mm) on order*

Very strong strawberry plants with a large number of induced flowers. The strongest stolons are harvested in August as a green plant and planted directly in the waiting bed. Luxury growing conditions guarantee high yield in the year of harvesting. This planttype is suitable for 60 day crop in substrate for early and late production as well as in raised beds outdoor.

Tray plants

on order*

For intensive cultivation with maximum yield:

- · Substrate culture
- raised beds

The root volume of our Tray plants is 0.23 l. The bigger the root ball, the better and faster the development of the plant in substrate

Potted fresh plants

on order*

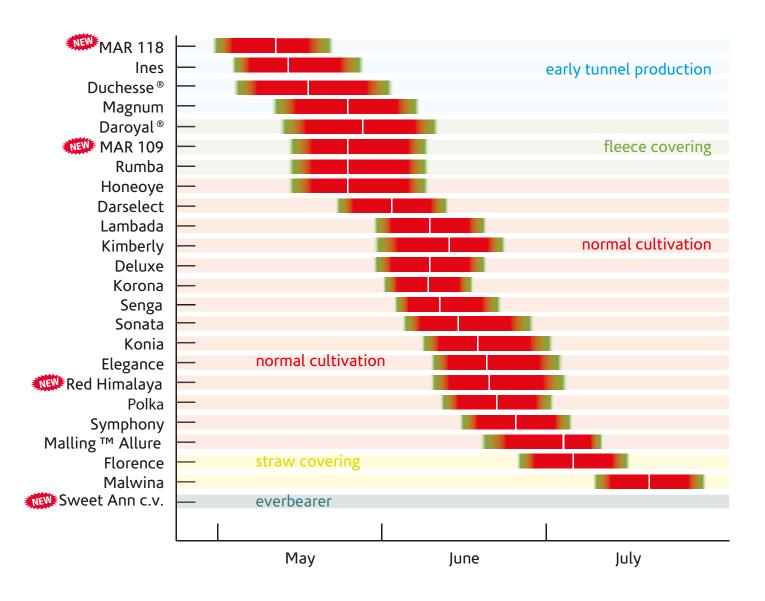
Potted green plants are mainly used for intensive types of cultivation such as substrate or raised beds.

In contrast to Tray plants, the potted fresh plants, however, are planted in August and cultivated into the upcoming crop year.

Varieties on request, orders are required!



Ripening time of our strawberries



Ordering

You plan to start growing strawberries?

You have questions concerning new varieties and types of production?

Then you should call us. We will be happy to advise you.

Thanks to our long experience in growing strawberries and strawberry plants, we are your competent contact partner.





+49 (0) 41 92 - 22 93 Monday-Friday: 8 am to 5 pm



+49 (0)4192-2491



info@kaack-pflanzenvermehrung.de



We ship your plants reliably and on time via frigo freight companies all around Europe. You also have the possibility to pick up the plants in our place.



Constantin Kaack
Managing director
c.kaack@kaackpflanzenvermehrung.de

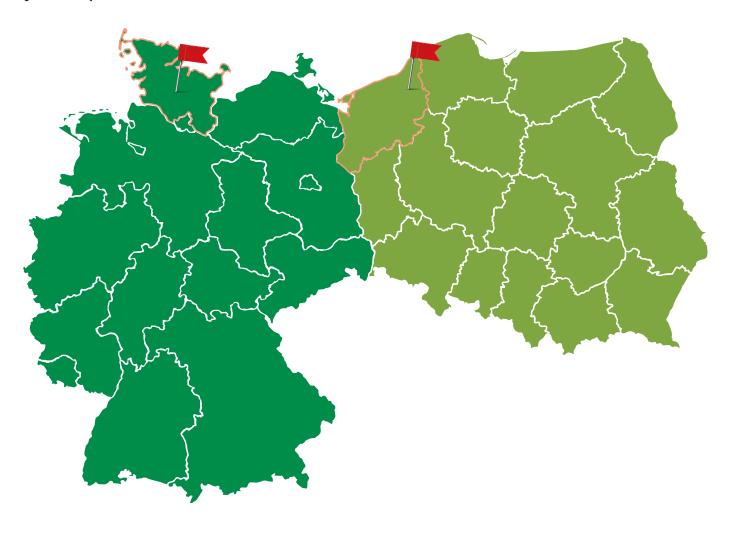


Sebastian KunzHead of sales
<u>s.kunz@kaack-</u>
pflanzenvermehrung.de





You'll find us here





Kaack Pflanzenvermehrung GmbH u. Co. KG Osterfeld 11 · 24649 Fuhlendorf Tel.: +49 (0) 41 92 / 22 93 · Fax: +49 (0) 41 92 / 24 91 E-Mail: info@kaack-pflanzenvermehrung.de