

# Welcome

- Han Blok
- Representative for Meeuwse, located in Goes
- Subject: fertilizing with irrigation + Phytobac



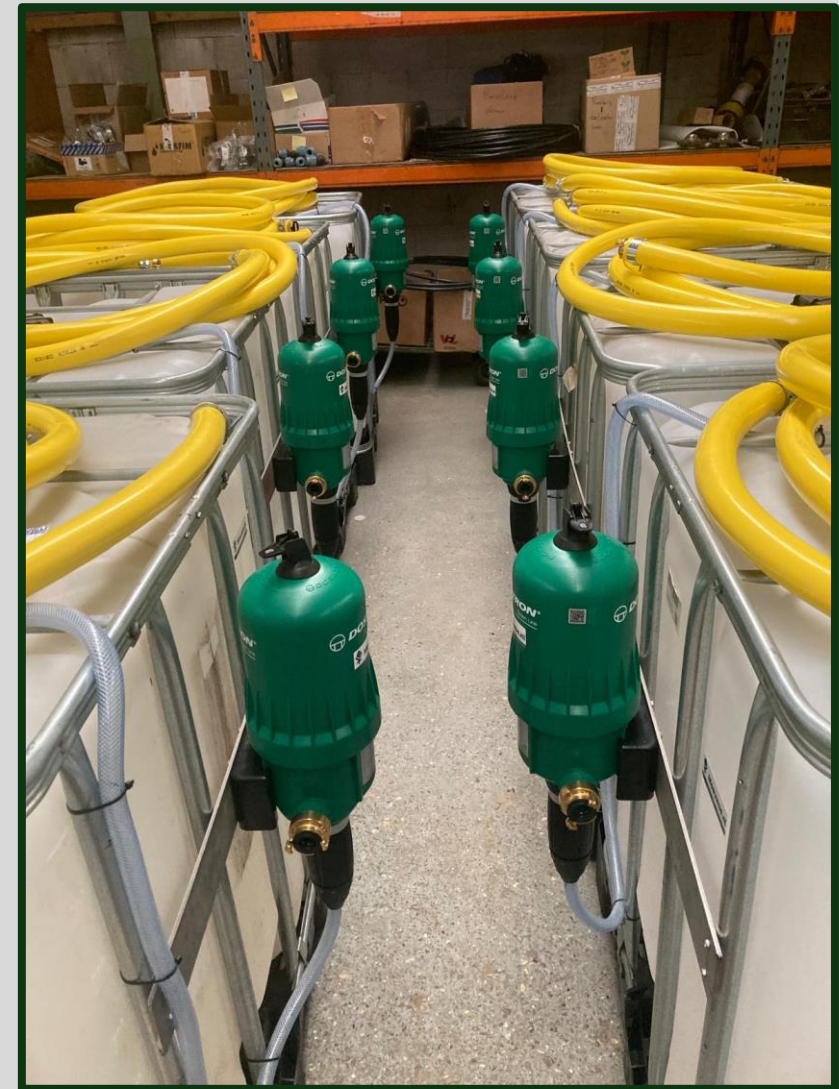
# Fertilizing with irrigation

- Combination of fertilization and irrigation
- Delivers nutrients directly through irrigation systems
  - ✓ Efficient, targeted, and adaptable to crop needs
- Why is this important?
  1. Improves nutrient uptake
  2. Reduces waste and environmental impact
  3. Saves time and labor



# Types of installation of Dosatrons

- Simple control: on/off
- Based on liters per hour







## Irrigation and fertilization container

- Made in different sizes: 8 ft, 10 ft, 20 ft
- Infinite number of fertigation lanes possible
- Possible options:
  - Radar control
  - Drone landing site
  - Camera surveillance
  - Laser or ultrasconic sound
  - Connection with AI
  - Weather forecast



# Fertigation

- Highest level of automation
- Timebased or l/ha
- Possibility to control EC and pH
- Proportional control of fertilizers
- Multiple fertigation streets at the same time
- Additional acidification via Ethatron

Agenda programma

Start  
20-01-2025 11:15

Programma  
fertigation

Fertigatie programma type  
liters

Secties

Sectie 1 (10.0m³/h-1.0ha) >>> 15m³ ☒

Sectie 2 (10.0m³/h-1.2ha) >>> 18m³ ☐

Sectie 3 (10.0m³/h-1.2ha) >>> 18m³ ☒

Sectie 4 (10.0m³/h-1.2ha) >>> 18m³ ☒

Start sectie  
Sectie 4

Pompen

Pomp 1 (11.0m³/h) ☒

Fertigatie

Fertigatie straat 1

Modus  
ON

Opening (%)  
% 50.0

Opslaan







# DolphinPlayer

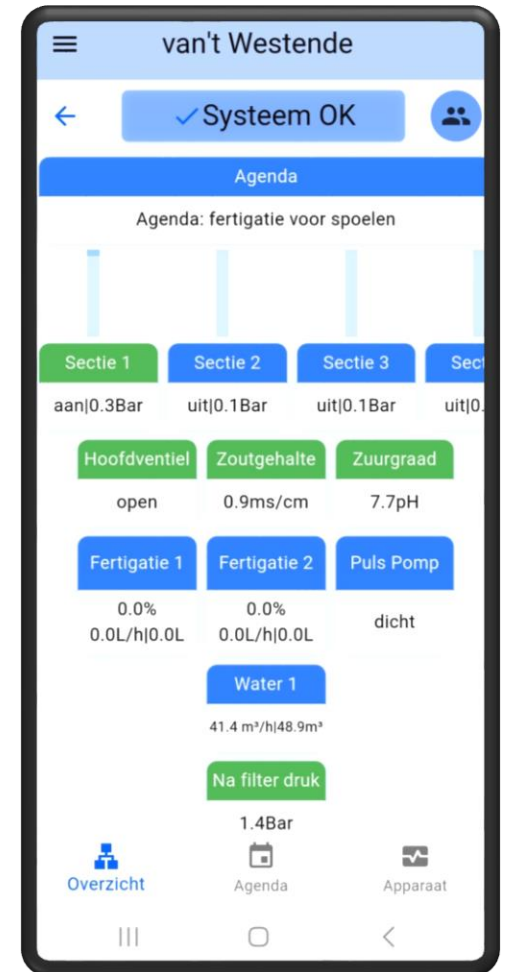
- Up to 2 wireless sections
- Push and react speeds, from app opening to the field takes seconds
- Solar panel and batteries
- Optional connecting of water pressure sensors per section.





## Full control by your fingertips:

- Manage fertilization systems remotely via smartphone
- Monitor real-time data: flow rate, pH, pressure, EC
- Set exact dosing schedules per nutrient
- Create fertilization schedules in advance with the agenda





# What is a Phytobac?

- System for collection and treatment of rinse water contaminated with plant protection products (PPPs).
- It is a patented system developed in collaboration with Bayer Crop Science.
- Closed system with no residual chemical waste.
- Proven technology (3500+ existing installations).



# Why a Phytobac?

- Crop protection products provide a healthy crop but can cause a lot of environmental damage in surface water. PhytoBac protects the surface water.
- Closed system without residual chemical waste.
- Durable due to biodegradation.



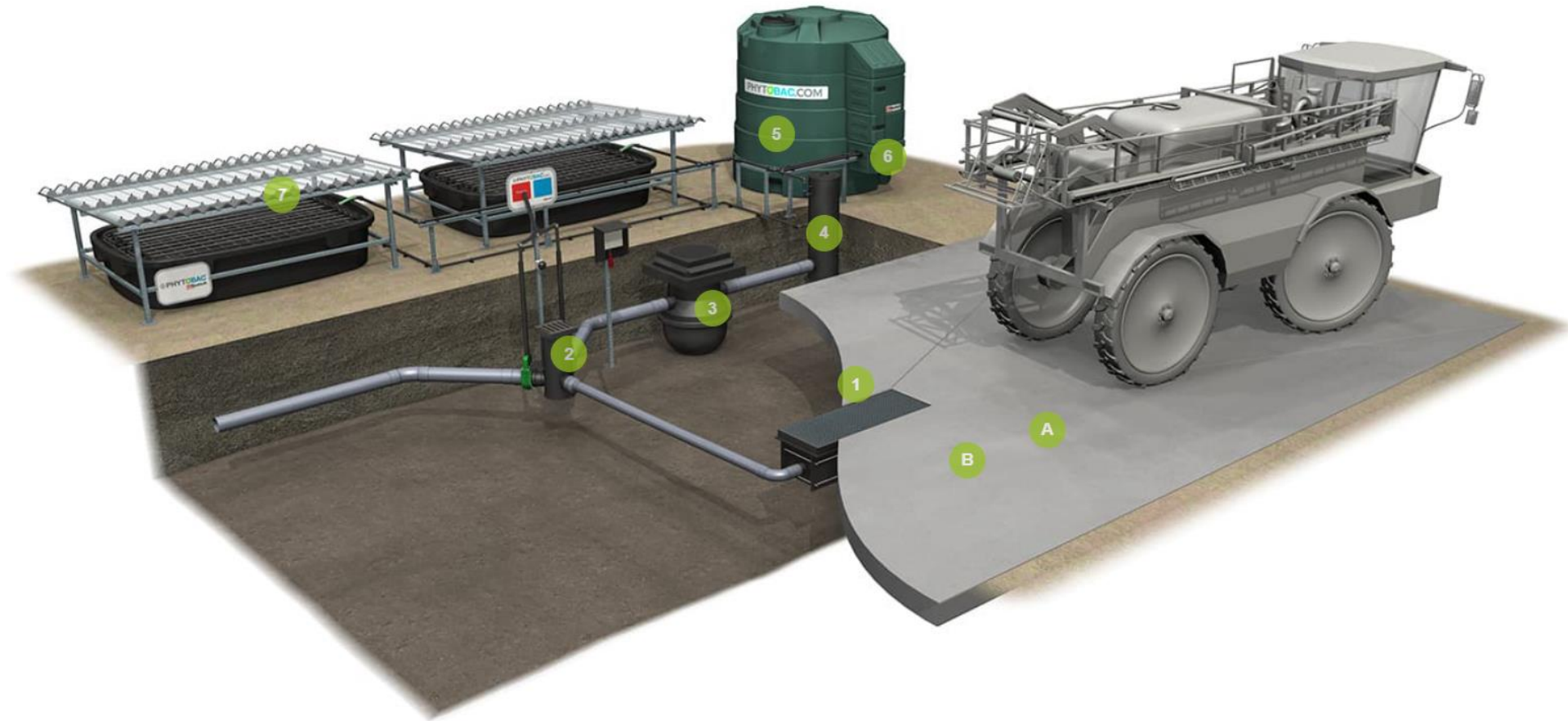


# Phytobac and laws and regulations

- Water framework directive [2027 in Europe]
  - Purpose: a healthy environment and clean water
- Prevent resources from becoming smaller
- Eligible for MIA/VAMIL and subsidies
- No permit required, but a reporting requirement to the municipality or environmental department
- This applies to the Netherlands, laws and regulations in your country may differ.



# Components of the system



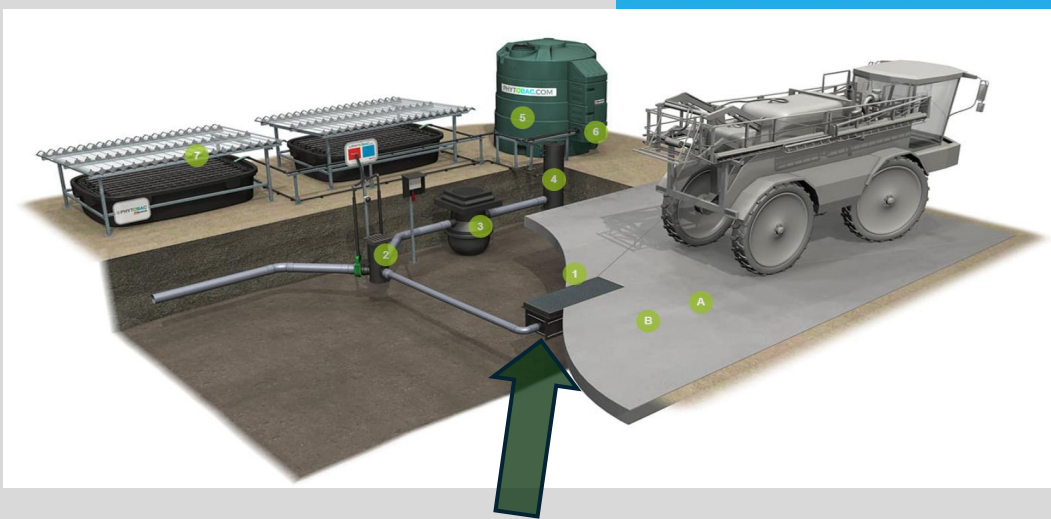


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## Pre-Sludge Trap in the Washing Area

Washing areas for agricultural machinery contain a high proportion of soil. The pre-sludge trap at the washing area reduces the wash water's flow rate, and foreign matter (soil, stones) conveniently settles on the bottom of the storage space. The module is covered with a heavy-duty grate accessible by vehicle. The pre-sludge trap can be easily cleaned using a flat shovel and a wheelbarrow.

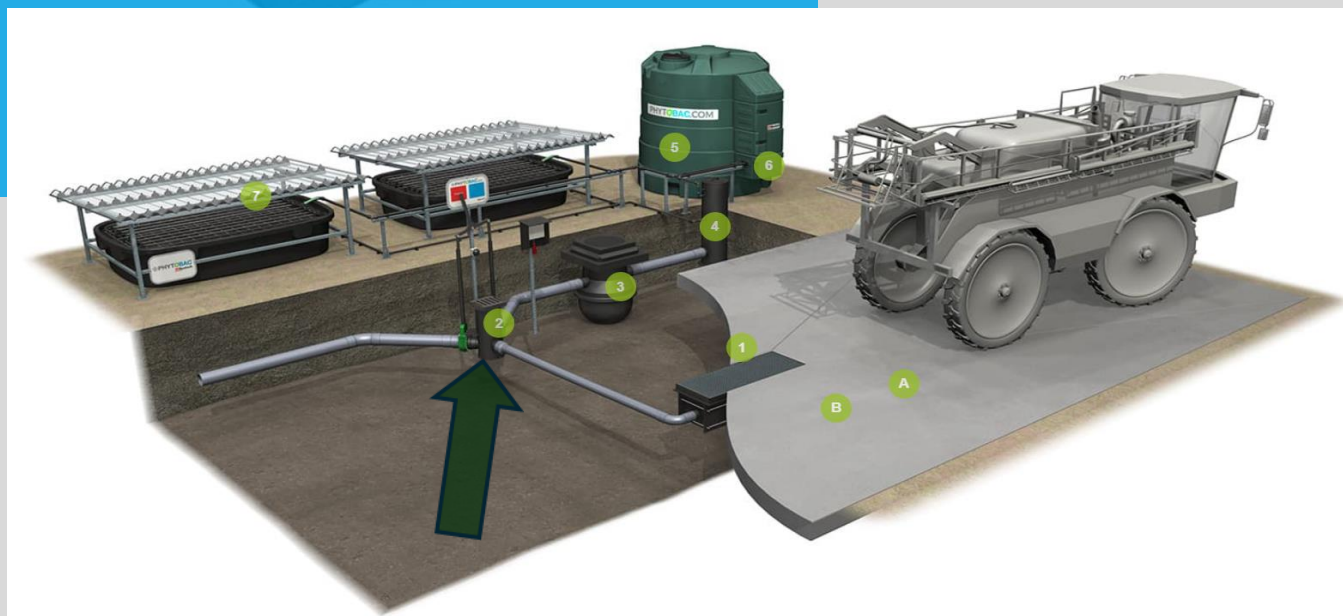






## Switch

The switch allows you to select between the two required water circuits: The contaminated wash water is directed into the buffer tank and automatically sprinkled onto the substrate. Effluent rainwater or clean wash water can be directed into a sewer, a draining ditch, or a biotope. You operate the switch with a lever which always indicates the desired drainage direction.

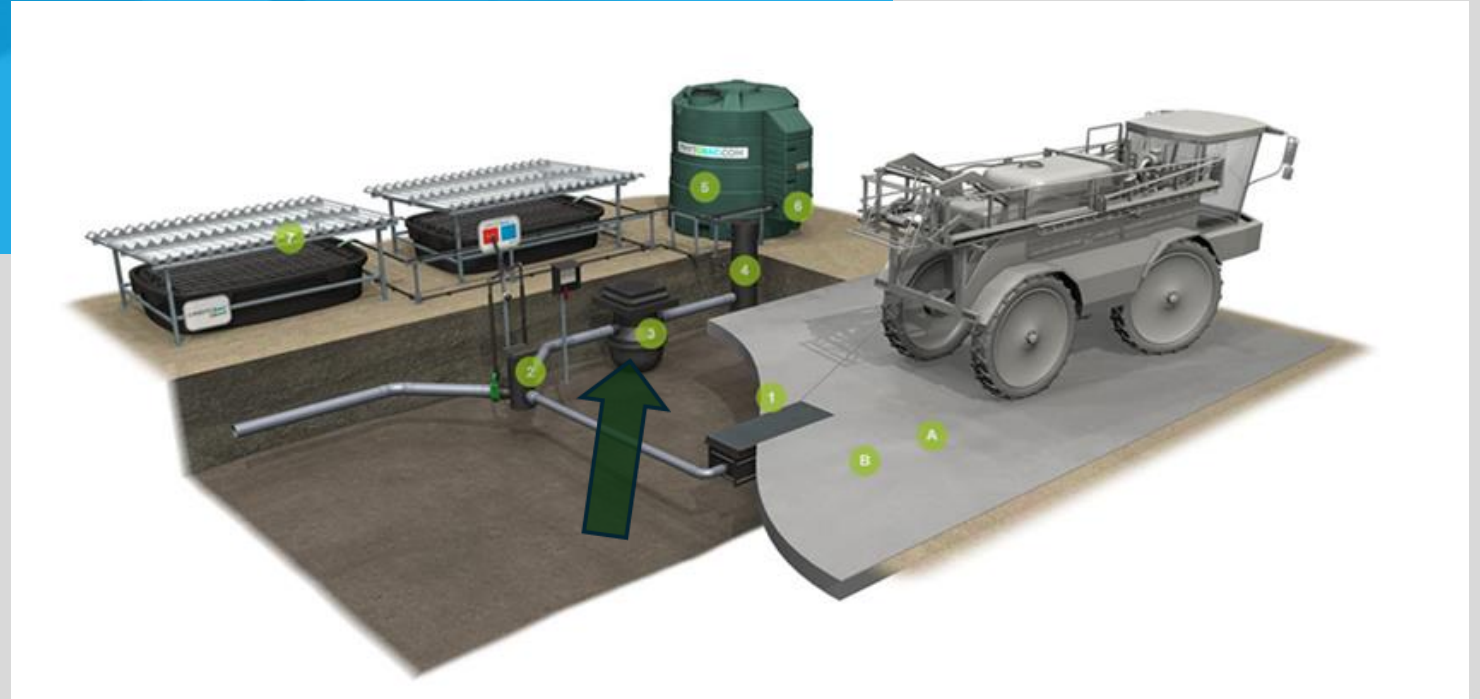






## Safety Sludge Trap

The sludge trap ensures that the operation of the Phytobac<sup>®</sup> system is not compromised by soil and dirt. The system is installed in front of the sump-pit.



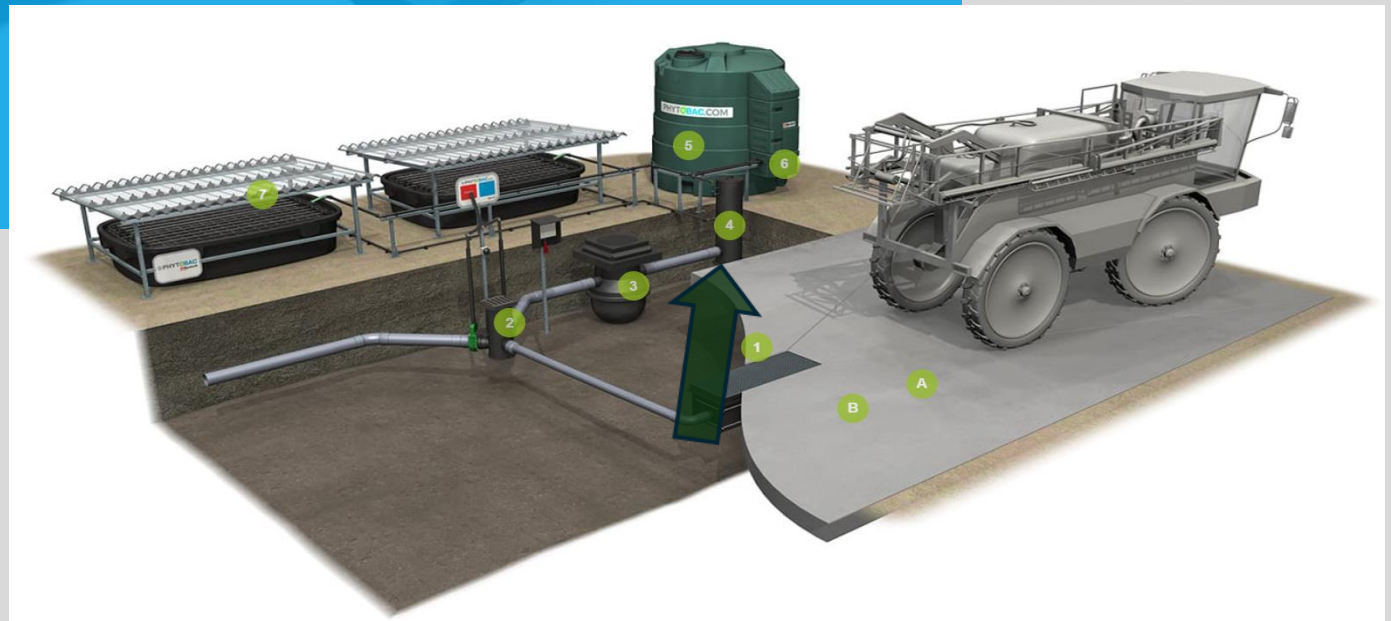




## Sump-Pit

The contaminated water from the washing area and the excess drainage water from the substrate container flow into the impermeable sump-pit. The water is pumped into the buffer tank via a stainless steel sump-pit pump. A safety shut-off prevents the buffer tank from overflowing.

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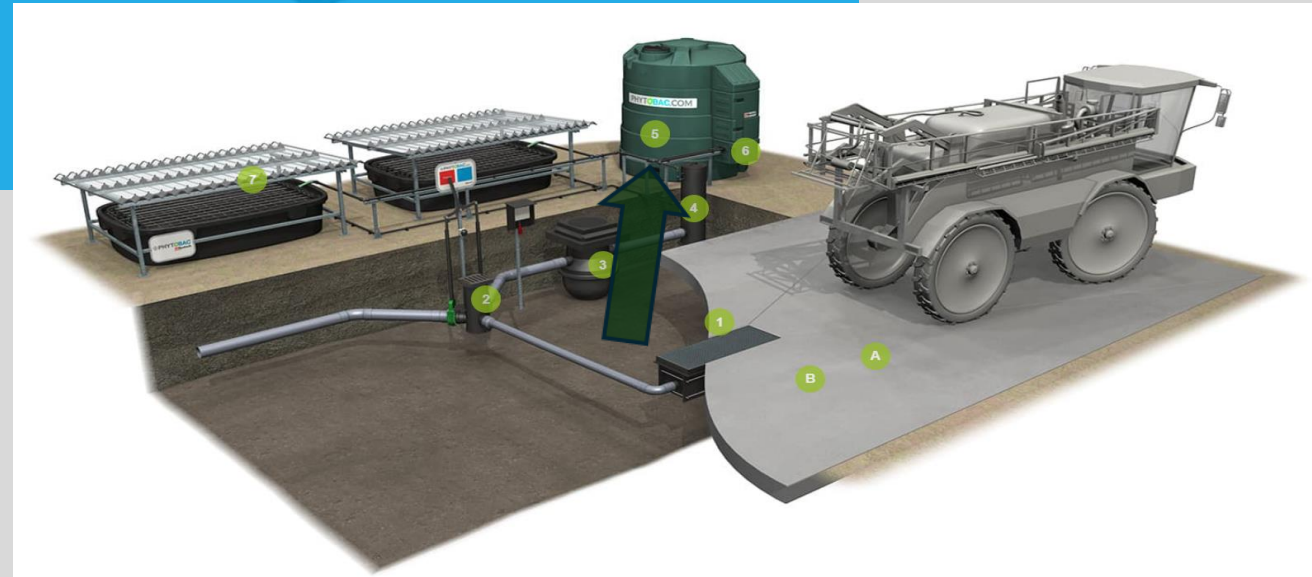


## Buffer Tank

The amount of contaminated wash water varies considerably during the spraying season, as does the evaporation rate in the substrate container. Hence the contaminated water is temporarily stored in the impermeable buffer tank and is sprinkled onto the substrate as needed.

The tank is double-walled and thus leak-proof. The fitted box contains the control system, the filter, and other connectors. Anti-frost protection and a mechanical level indicator guarantee the system's functionality. The buffer tank can be supplied in five different sizes depending on your farm's requirements.

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# Control System

The control unit with sensor monitors the optimal degradation and evaporation conditions in the substrate. The regulation of the appropriate sprinkling frequency is fully automated.

The CE marking fulfils the EMC norms 2006/95/EG (EN 6100-6-1/3).



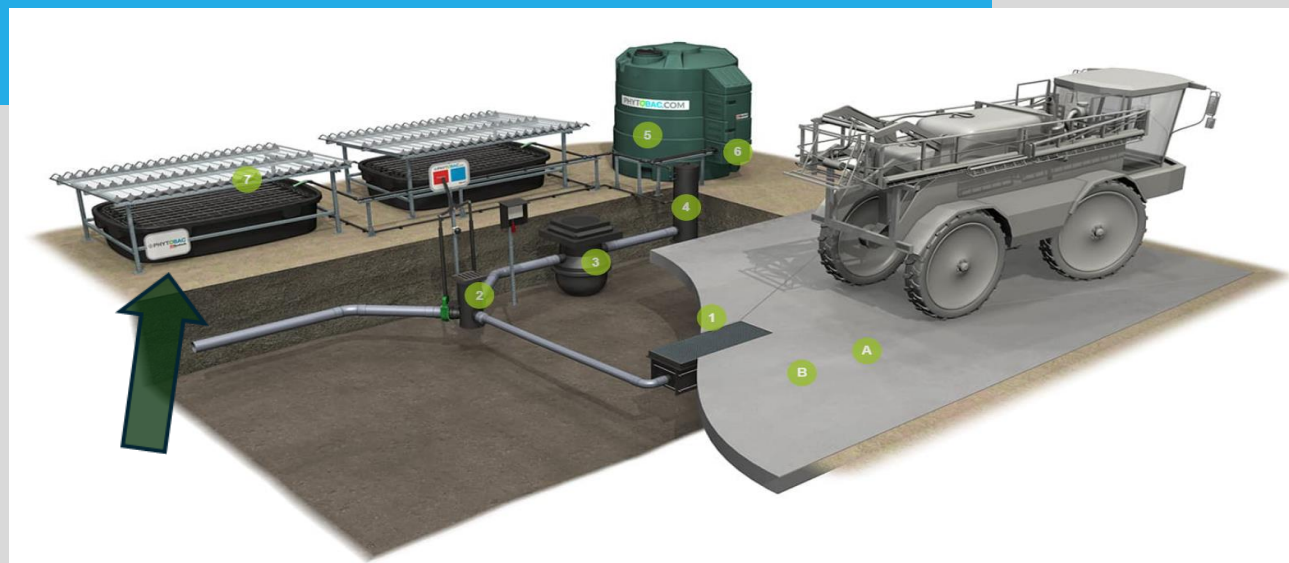




# Substrate Container

The Phytobac® substrate container consists of an impermeable container with a height-adjustable rain roof, an inspection tube, and a pre-mounted drip and drain pipe.

For the substrate, simply mix biologically active soil from your farmland with straw. The soil naturally contains micro-organisms which degrade crop protection residues. Sensors and the fully automated control system keep the substrate moist. The micro-organisms can thus degrade the residues from the wash water under optimal conditions, and the clean water evaporates from the surface.



# Interested to be a Phytobac representative your country?

Please contact us!