Inagro, active in...
Research department for covered crops

Greenhouse: 20 years
Brownfield Site Vuylsteke in 2008
2014-2015 : REO Veiling builds a new warehouse
+-8000m² research rooftop greenhouse

2016: Multidisciplinary design team:
META Architectuurbureau, Van Bergen Kolpa Architecten, Smiemans, Tractebel Engineering (Technum), Wageningen UR Glastuinbouw
Agrotopia infrastructure

Characteristics:
• +/- 8000 m² on top of an 8 m high warehouse
• 10 cultivation compartments
• Fruit vegetables and leafy vegetables
• Soilless cultivation, hydroponics
COMPARTMENTS

5 compartments with hydroponic systems for fruit vegetables (tomato, cucumber)
COMPARTMENTS

5 compartments with hydroponic systems for leafy vegetables (NFT, DFT)
MULTILAYER GROWING

1 closed compartment

Hydroponic system with LED lighting
12M HIGH VERTICAL COMPARTMENT
AGROTOPIA, CLOSING THE LOOPS
RESEARCH FOCUS

- Showcase for high tech urban farming
- Innovations and applications for greenhouse horticulture and urban farming
UGent endowed chair Agrotopia

Launched 2017 with the support of Inagro and REO veiling
The UGent endowed chair Agrotopia works towards

1. the transition to a durable greenhouse horticulture in Flanders by developing innovative concepts in greenhouse technology

2. implementing the principles of the circular economy along with increasing the profitability in an urbanized environment with limited space while

3. achieving a fast implementation of innovations in greenhouse horticulture and urban and vertical farming

4. international support for urban farming amongst growers and consumers.
Expertise

Nico Boon  *microbial ecology and technology*

Danny Geelen  *plant physiology*

Monica Höfte  *plant diseases*

Jan Pieters  *greenhouse construction and climate control*

Kathy Steppe  *plant ecophysiology, plant sensors and plant modelling*

Marie-Christine Van Labeke  *crop physiology and climate control; stress and plant responses*

AGROTOPIA, LIVING LAB

Co-create to innovate

- Multidisciplinary and multistakeholder approach to further develop high technological greenhouse and urban farming concepts and innovations
- From the start of the innovation process, end users are involved

Techniques & technologies are developed towards the needs of the target groups,

Facilitating market introduction and implementation.
AGROTOPIA, LIVING LAB

Co-create to innovate

Methodologies:

• State-of-the-art/market analysis
• Concept development: surveys, interviews, brainstorm sessions,...
• Greenhouse testing, user experience
• Demonstrations and workshops
AGROTOPIA, DEMONSTRATION

Unique platform

• Close to the end users
• Demonstrate best practices and innovations
• Open to the general public
ACKNOWLEDGEMENTS:

The design team:
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Thank you for your attention!

Volg ons op
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