

A close-up photograph of a bee flying over a purple flower. The bee is in the upper right corner, and the flower is in the center. The background is a soft, out-of-focus green and purple.

INTRODUCTION DNA INSECTSCAN

Innovative method for monitoring insect biodiversity on green walls and roofs.

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PARTNERSHIP

SGS

&

 **MOBILANE**
BUILDING GREEN

ABOUT US

The logo for SGS, featuring the letters 'SGS' in a bold, sans-serif font. A vertical red line is positioned to the right of the 'S', and a horizontal red line is positioned below the 'S'.

- Since 1870, now 2650 offices and laboratories.
- Largest in independent **inspection, certification** and **testing**.
- In the Netherlands, SGS Search is the inspection agency for the **sustainably built environment**.

The logo for MOBILANE, featuring a stylized graphic of four circles (two green, two orange) arranged in a 2x2 grid. To the right of the graphic, the word 'MOBILANE' is written in a bold, sans-serif font, with 'BUILDING GREEN' in a smaller font below it.

- Green expert **since 1926**
- 5 European offices and agents worldwide
- **250** employees and its own **social workplace**





Oase Lease – Bridge baskets, Amsterdam, The Netherlands





Mobilane - Green bus stops, Utrecht, The Netherlands



NATURE-INCLUSIVE CONSTRUCTION: LIVING WALLS

BENEFITS

Instant privacy and greenery result

Easy and fast to install

Contributes to biodiversity

Contributes to a healthy environment

Improves air quality

Reduces fine dust with 40 - 60%*

Contributes to the greening of urban areas



BIODIVERSITY LIVING WALLS

○ — Nector source (wild) bee

○ — Food source for e.g. birds and insects

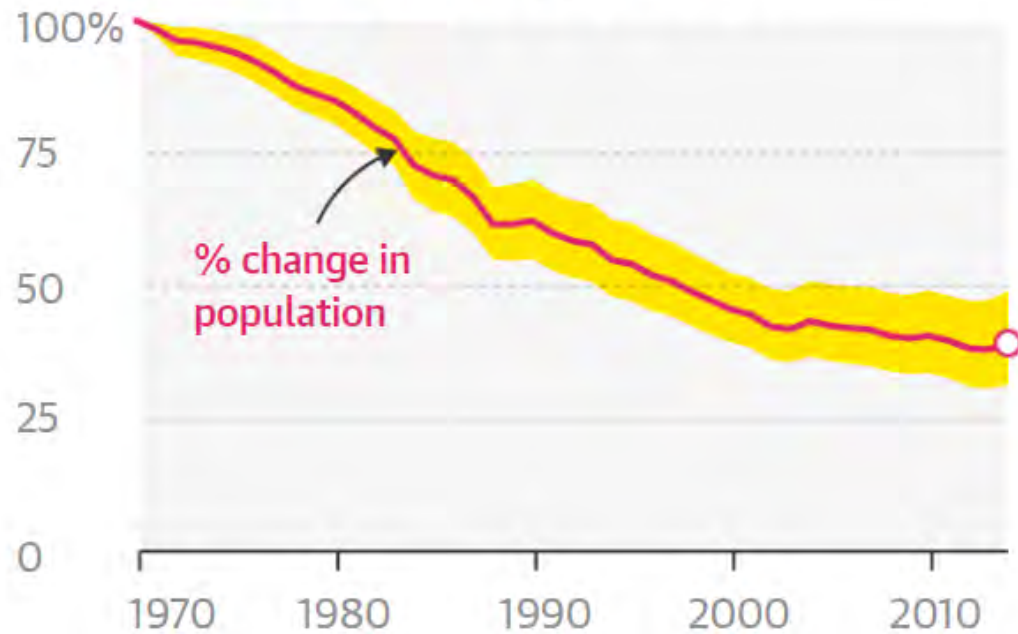
○ — Shelter and nesting place

○ — Wintering place for insects such as flies and butterflies



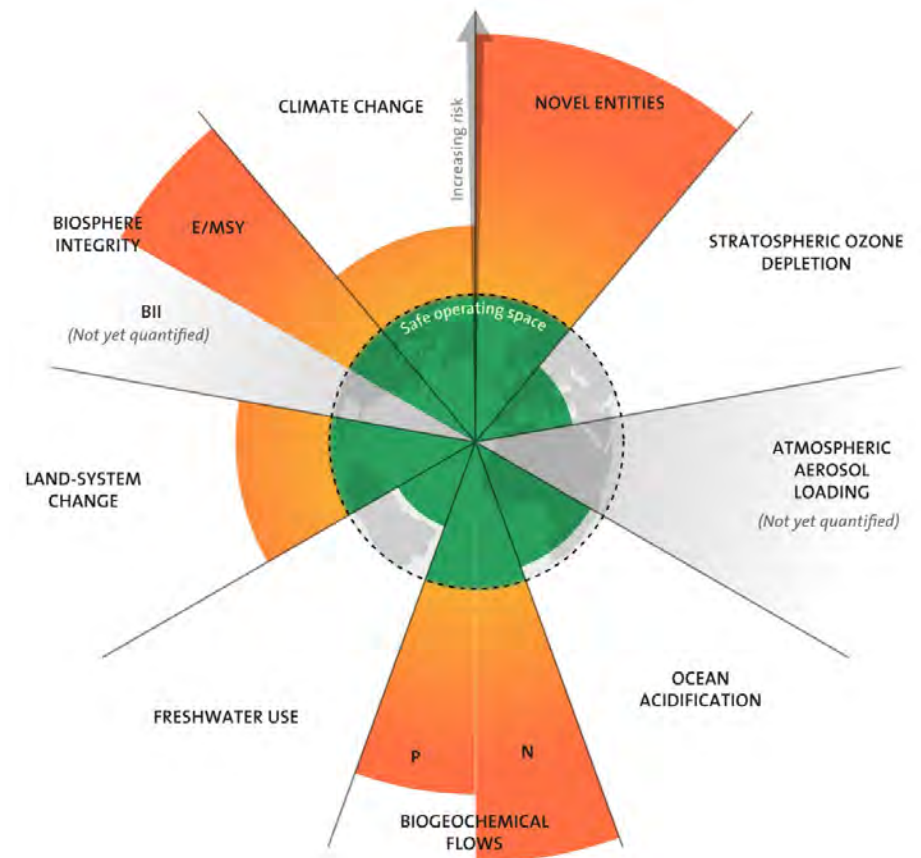
HOW ARE WE DOING?

Since 1970, 60% of the world's vertebrate animals have been wiped out



Source: Living Planet index, WWF/ZSL.

The nine Planetary Boundaries

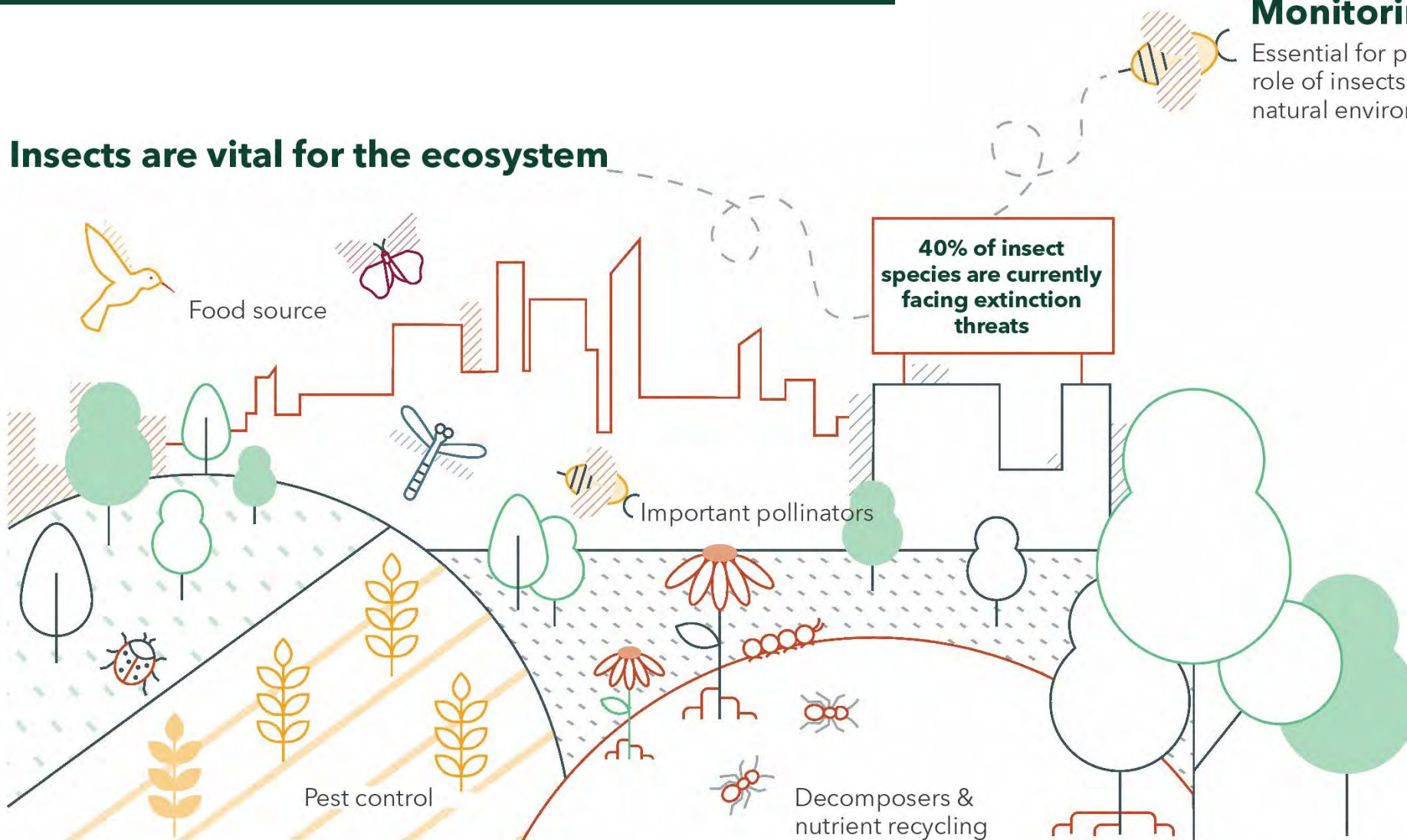


BII: Biodiversity Intactness Index, E/MSY: Extinction per million species; P: Phosphorous; N: Nitrogen; Novel Entities: i.e. plastics and chemicals



WHY THE FOCUS ON INSECTS?

Insects are vital for the ecosystem



Monitoring insect biodiversity

Essential for preserving the role of insects in urban and natural environments.



By analyzing DNA left behind by insects

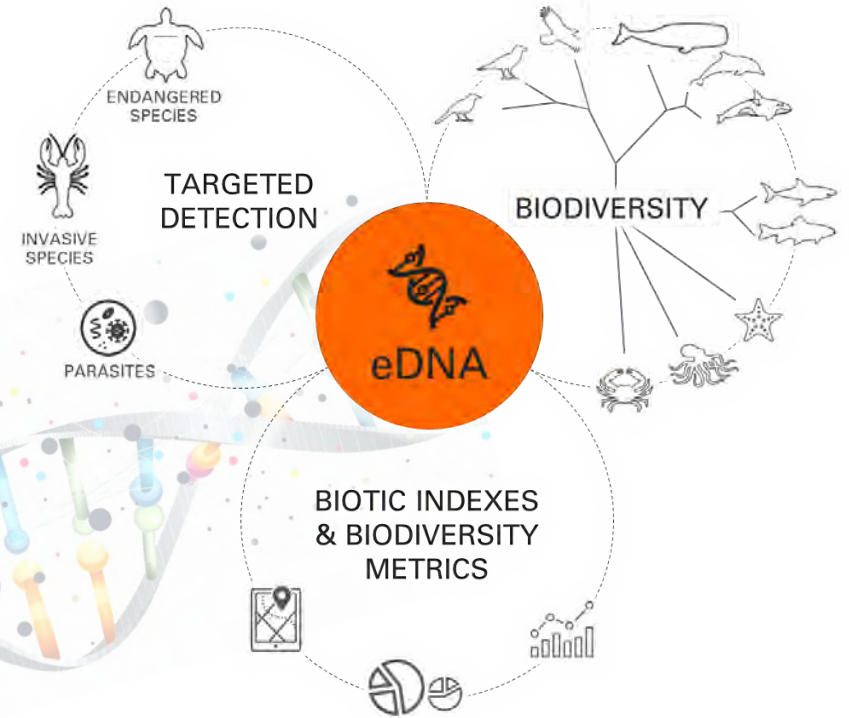
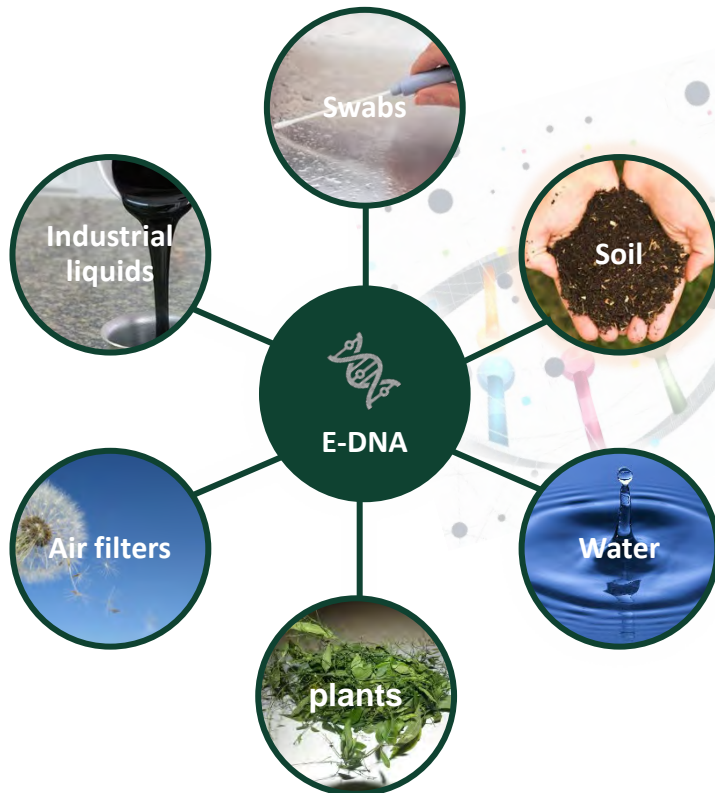


Discover the biological diversity through forensic DNA techniques



WHAT IS 'ENVIRONMENTAL DNA'?

Genetic material left behind by an organism in the environment. Types of samples include:



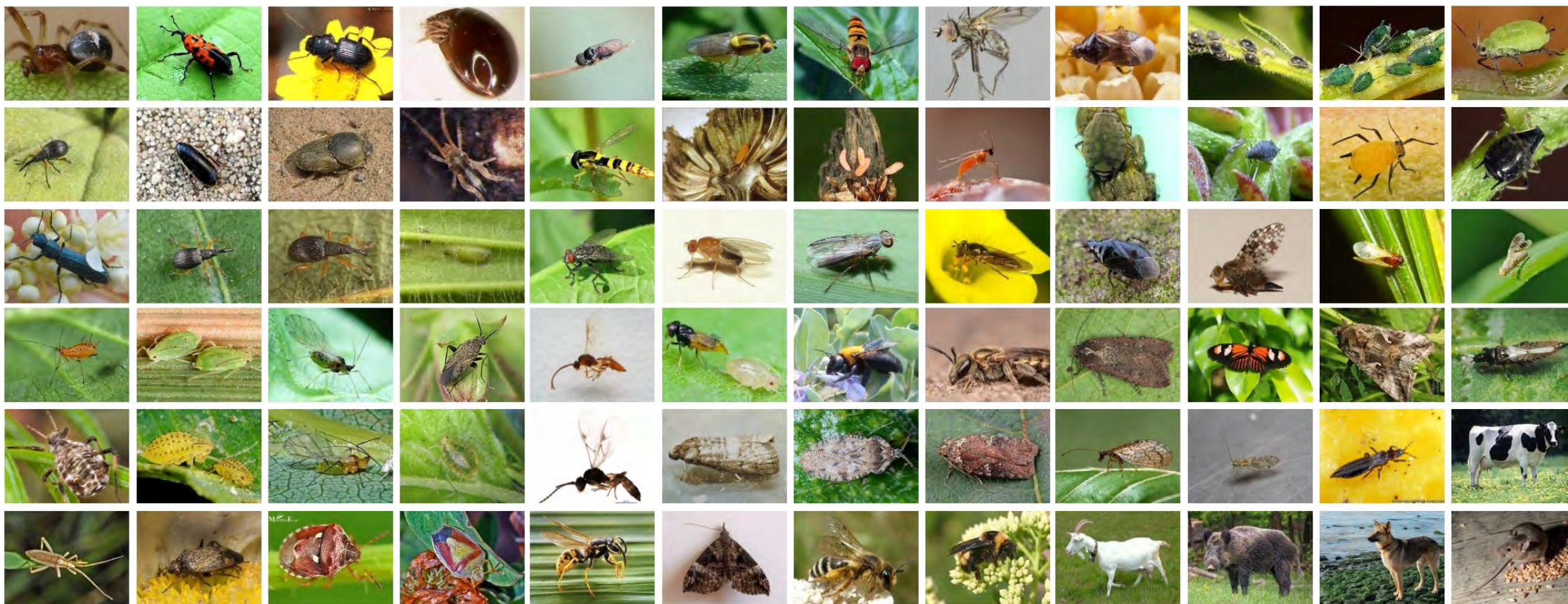
What can i do with it?



IN PICTURES: INSECT BIODIVERSITY ON FLOWERS

15 flowers sampled

70 genera / 68 species



CASE STUDY: GREEN FACADES OFFICE BUILDING

BACKGROUND INFORMATION



Project

Plaats Bunnik, the Netherlands
Start bouw en opleving 2020, 2021

Green façades as a solution for

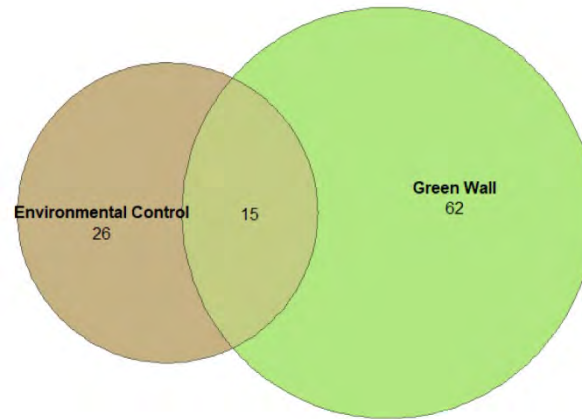
- Nature-inclusive building
- Encourage local biodiversity
- Use sustainable and circular products



CASE STUDY: GREEN FACADES OFFICE BUILDING



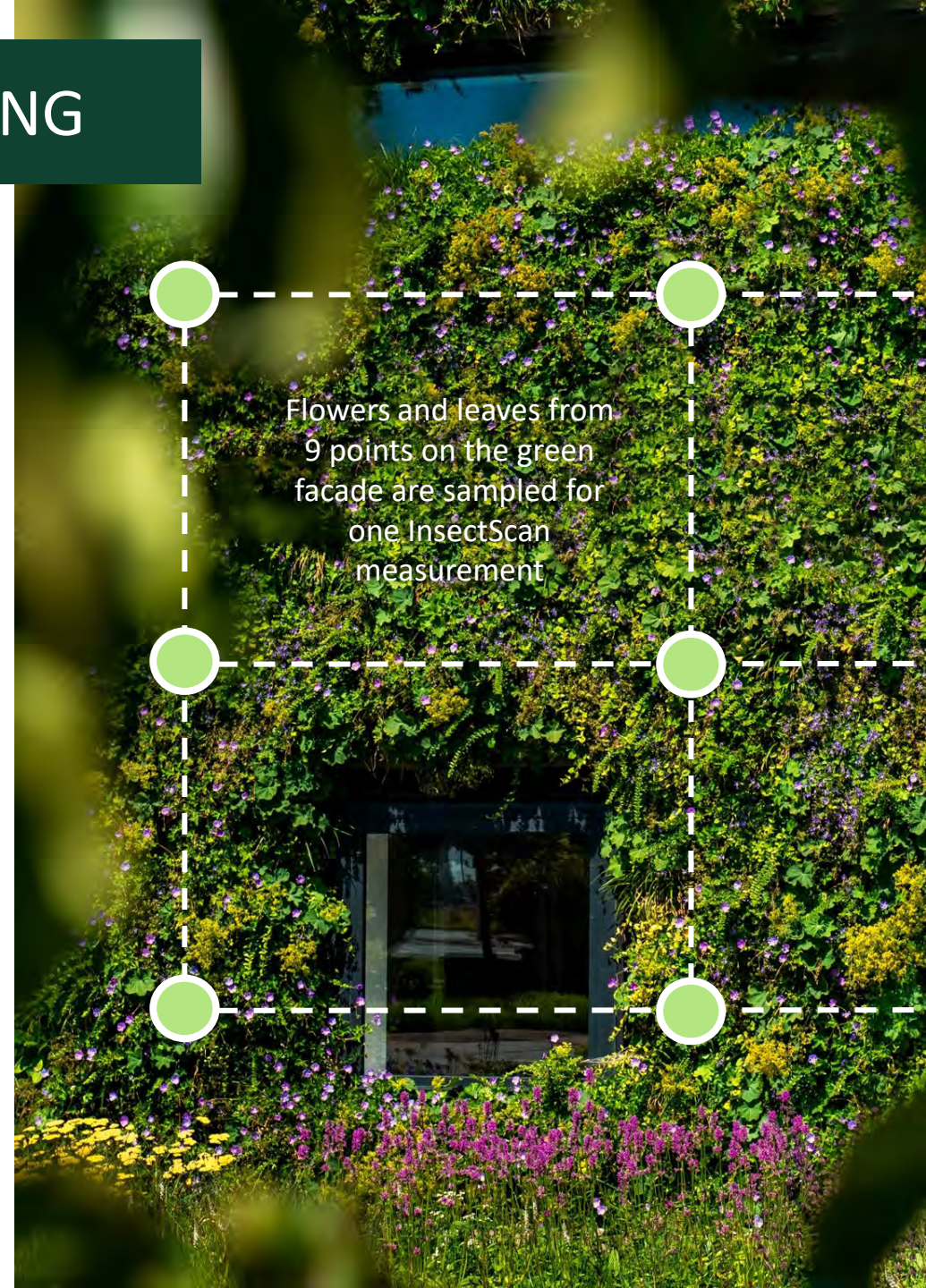
Number of insect species per sample type:



Sample Location
● Environmental Control
● Green Wall



It is necessary to verify the above contrast over several seasons and over several years. Biodiversity is influenced by many aspects and cannot be determined by a snapshot.



SUMMARY BIODIVERSITY GREEN FACADES

- — Regaining lost **habitat** with green facades
- — **Monitor biodiversity** on green facades and roofs effectively and at any scale
- — Expressing biodiversity in **data**
- — **Simple, quick** and **reliable** research method
- — Biodiversity for business **ESG report** (2024)



DNA INSECTSCAN



BUGG[®]

Bundesverband GebäudeGrün e. V.

Dach-, Fassaden- und Innenraumbegrünung

Want to know more?

Mobilane

📍 Stand Number 31

Partnership

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