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Bee hotel and beyond: Citizens on the frontline of bee research – a journey from fear to fascination

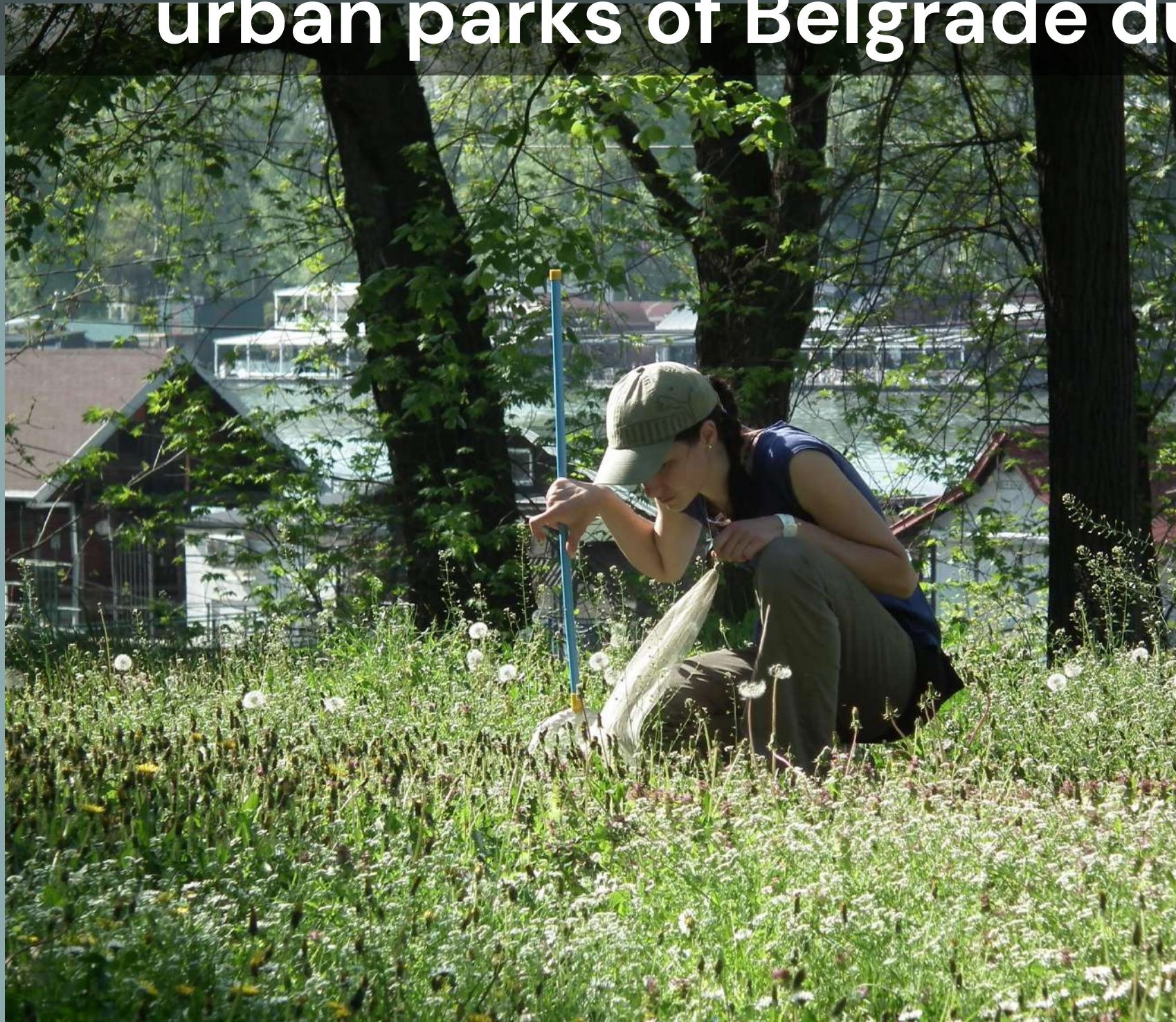
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📷 [belgrade.bees.ecology](https://www.instagram.com/belgrade.bees.ecology)



My journey into citizen science began in the urban parks of Belgrade during my PhD research





It all begins with **curiosity.**

Thirst for knowledge about nature – a curiosity that is rarely satisfied in our everyday lives.



Social media as a valuable tool

Space for distraction?

Space for spreading the
conspiracy theories?

**Engage a wider audience and
spark curiosity about nature
and science.**





Questions from curious citizens



Stories and educational videos on Instagram

How to address and **connect** to people you are talking to

People will remember **how they feel** while doing something: show them how important their help is and recognize their contribution

How to see **their perspective**

Who is behind the information/message? Only then the audience will decide to trust us and join our cause

WANTED

MEGACHILE SCULPTURALIS



Poreklo: Azija

Naziv:

Megachile sculpturalis

Boja: crna sa bakarno-narandžastim dlakama

Veličina: 1.5-2.6 cm

Period aktivnosti:

jun-avgust

Ukoliko primetite ovu pčelu slikajte je ili snimite i pošaljite nam na e-mail:
azijska.pcela@bio.bg.ac.rs



pesticides
climate change
habitat destruction
invasive species

What we have done
to protect the bees

bees



Citizen science

Connecting with people and how it comes back in unexpected ways...



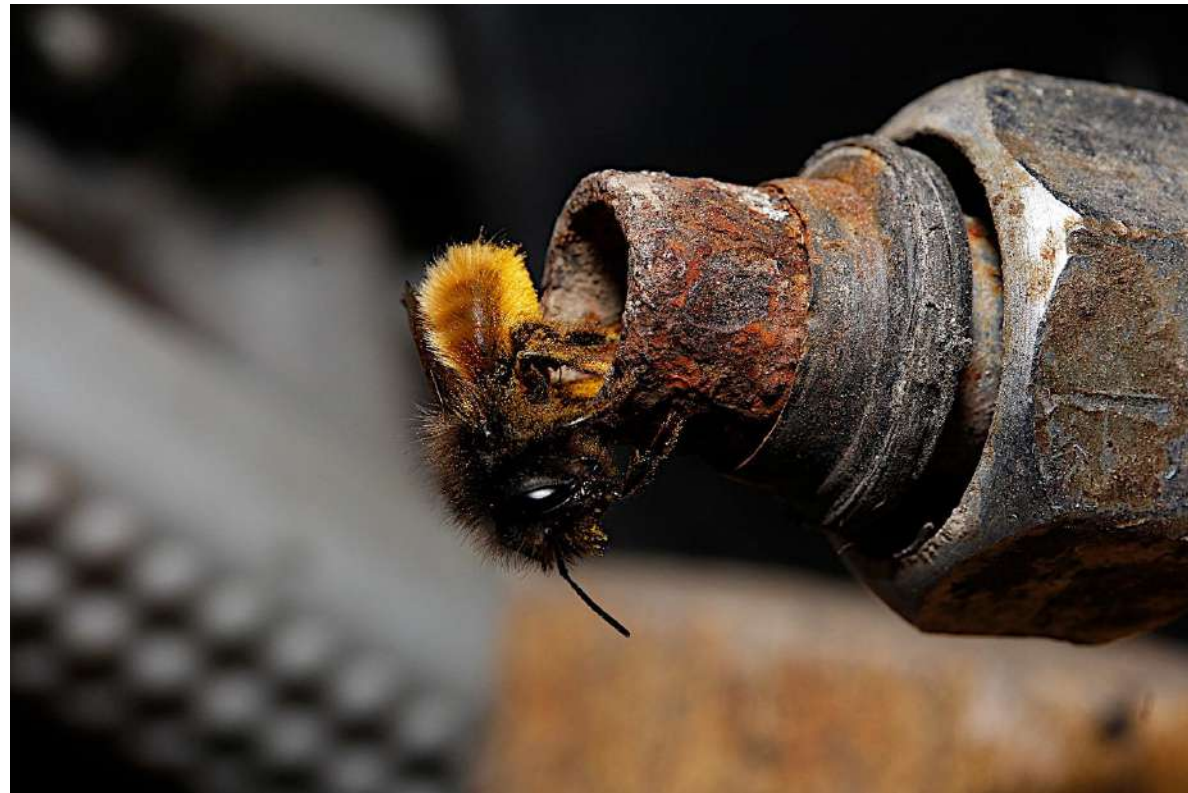
Solitary bees nesting in bee hotels



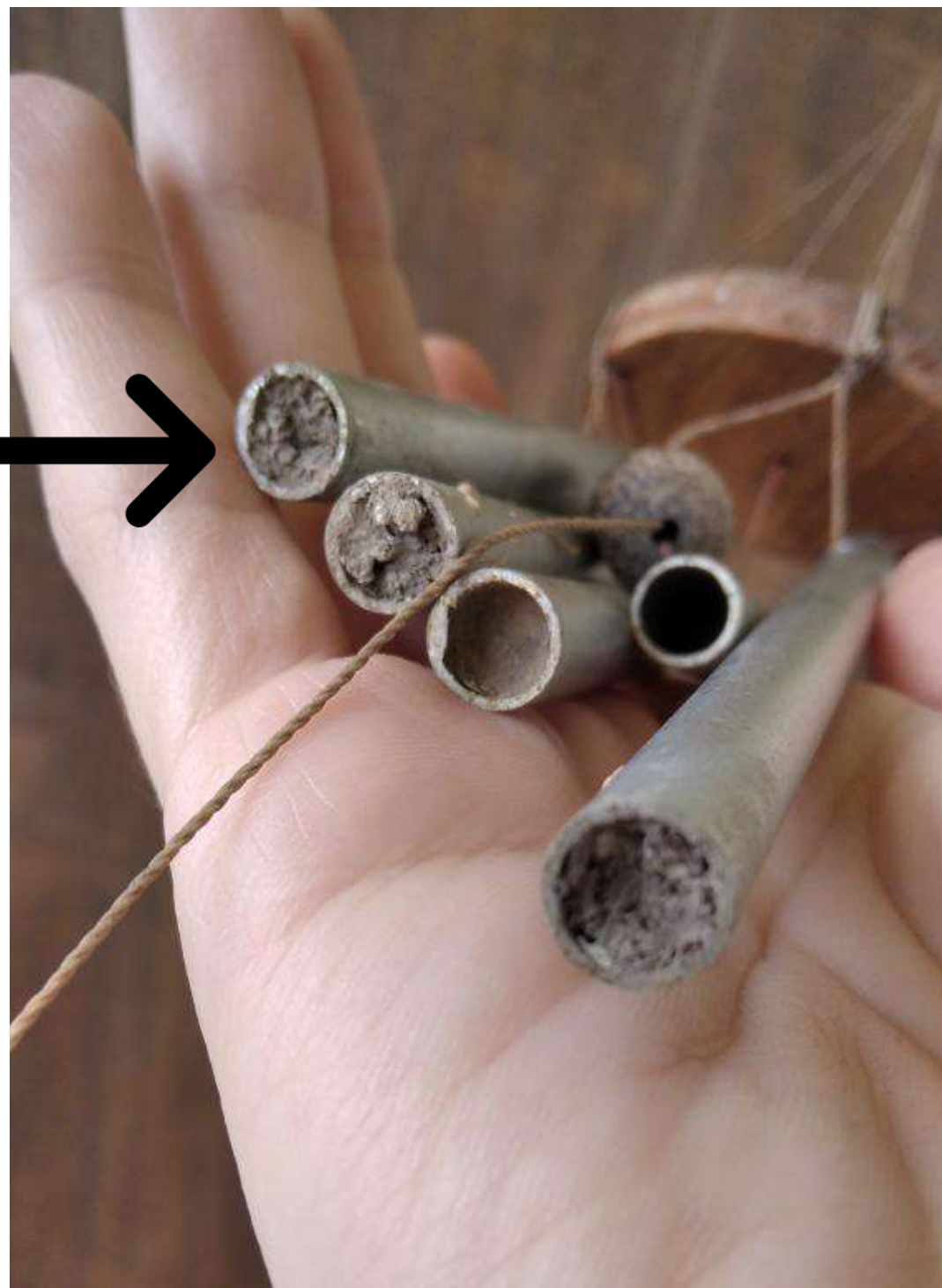
Solitary bees



Which bee is this? – exploring who checks into my bee hotel



Which bee is this? – exploring who checks into my bee hotel



Which bee is this? – exploring who checks into my bee hotel



Megachile sculpturalis

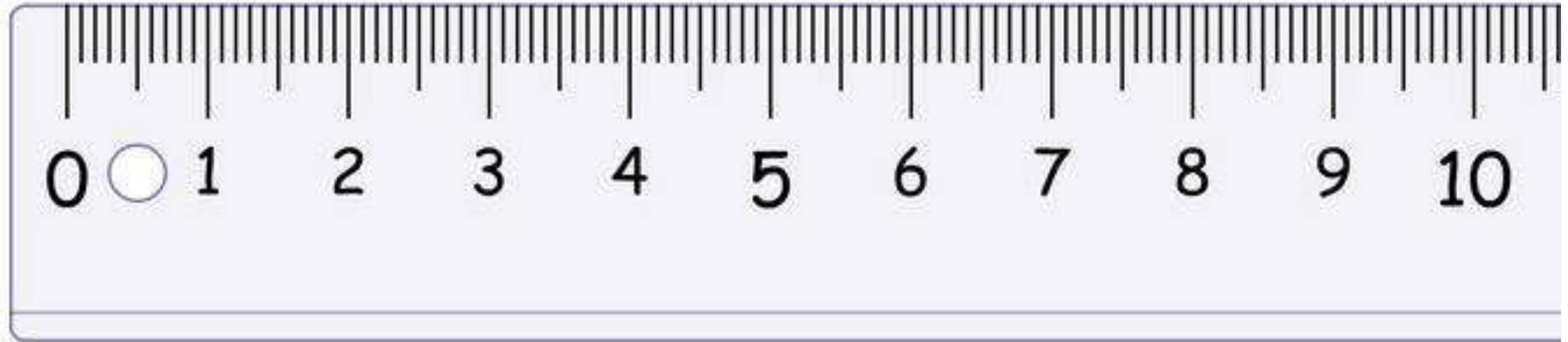
Apis mellifera

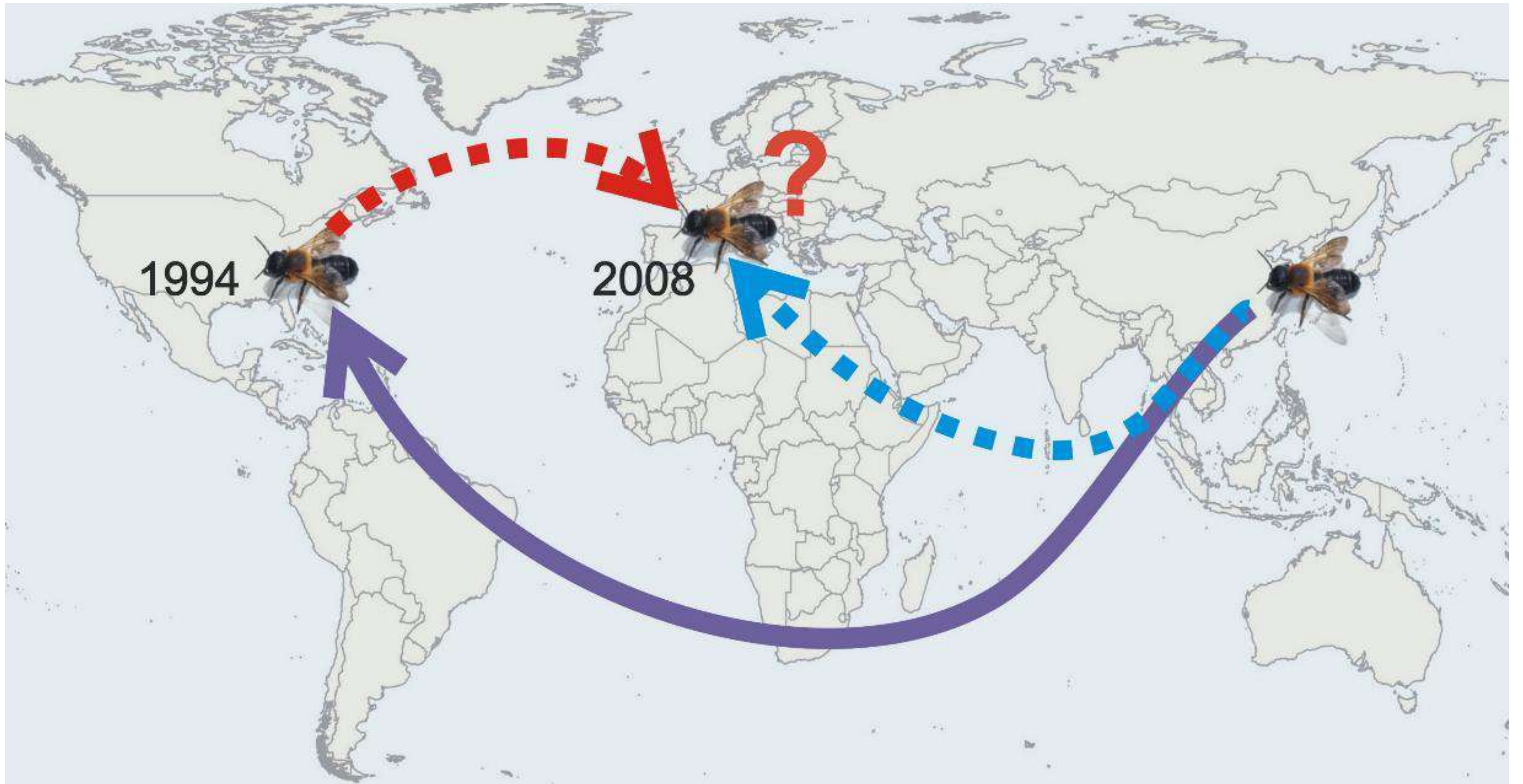


female 22-26 mm

male 14-19 mm

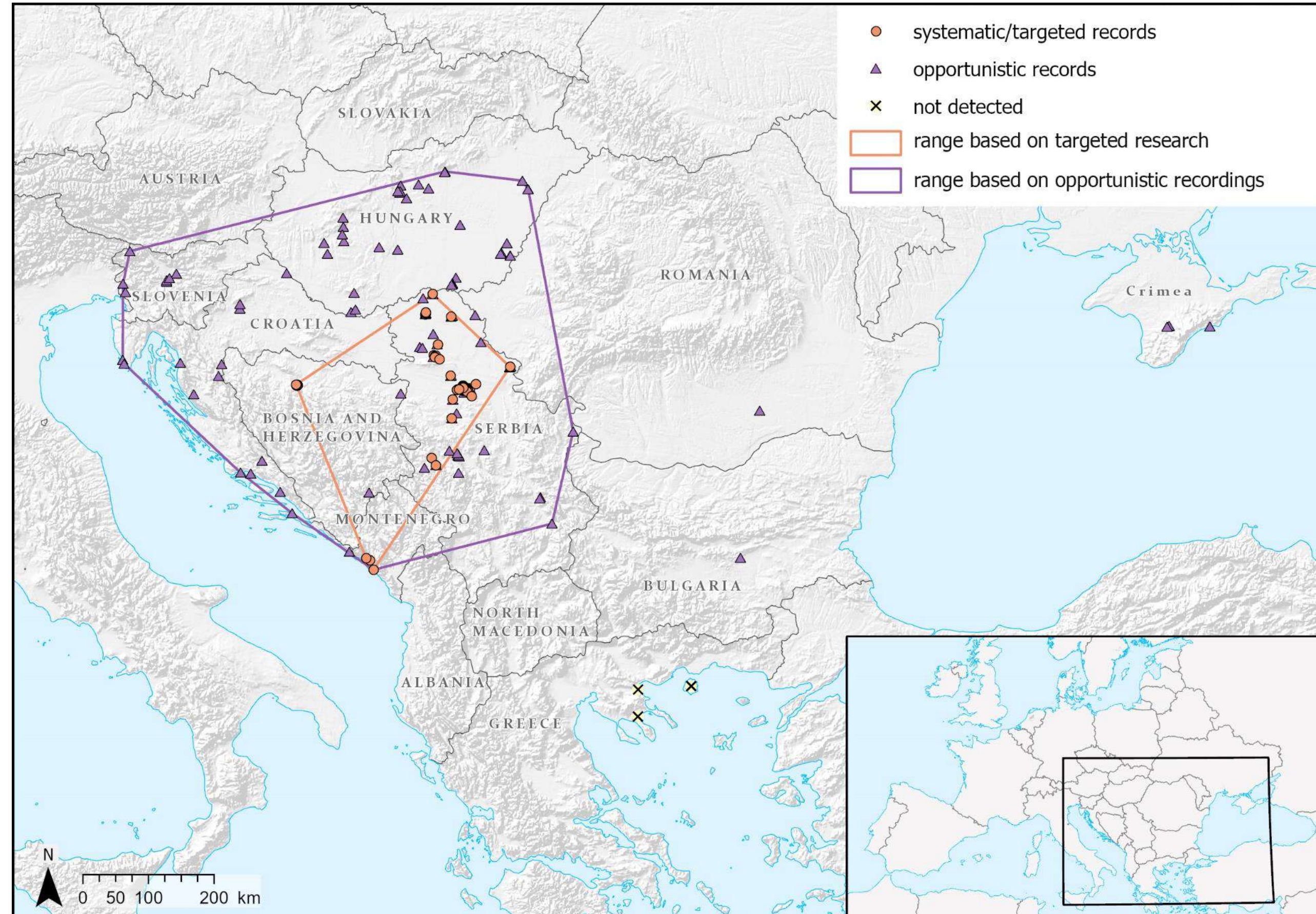
honey bee
worker ~15 mm





Occurrence of the sculptured resin bee in Serbia and region

Data collected through citizen science: area is 5 times larger than the area obtained through targeted, organized scientific research!



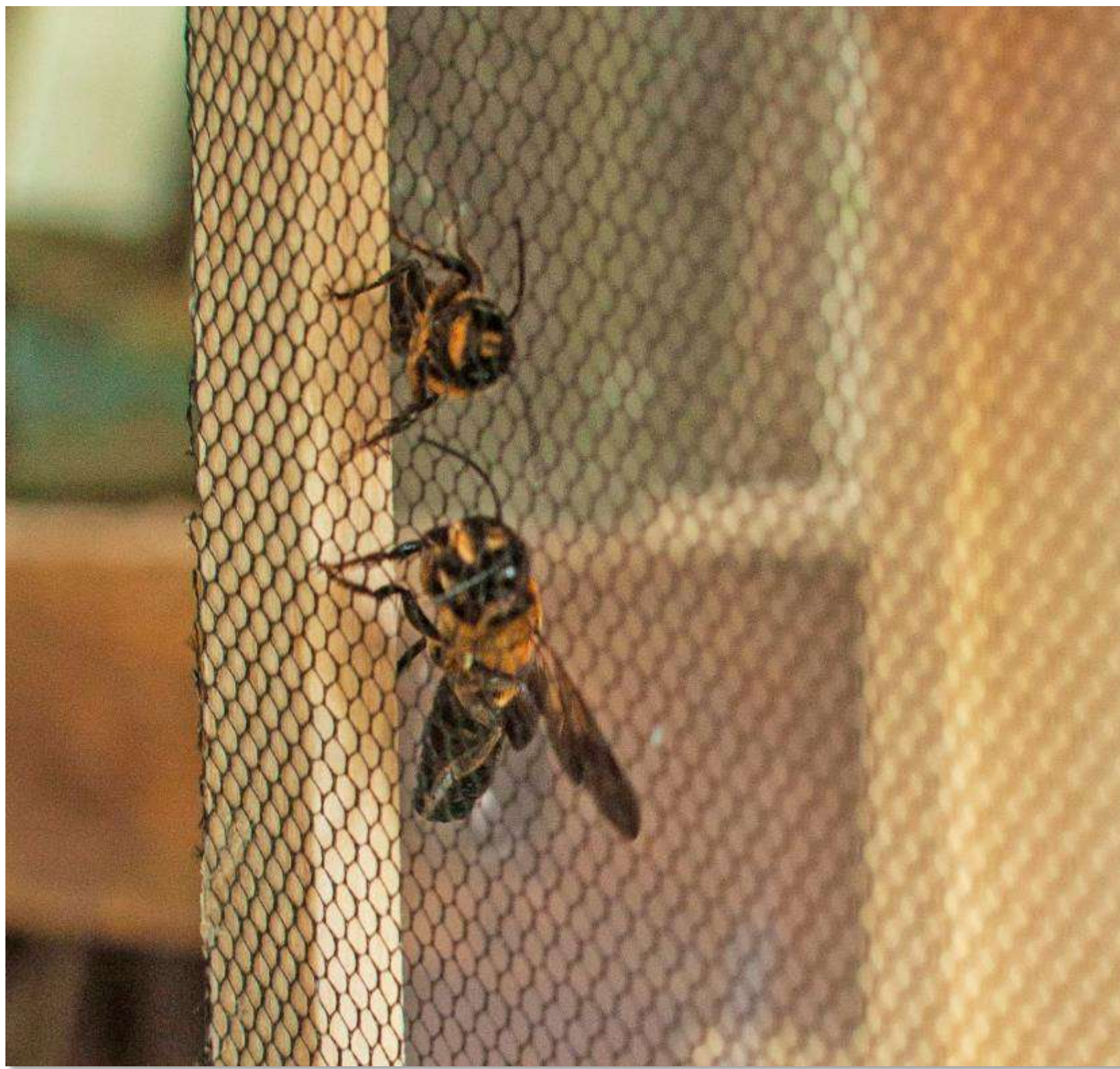
NEW POSSIBILITIES THANKS TO CITIZEN SCIENCE

- Plants visited by this bee
- Behavior at nests
- Materials they collect for nest

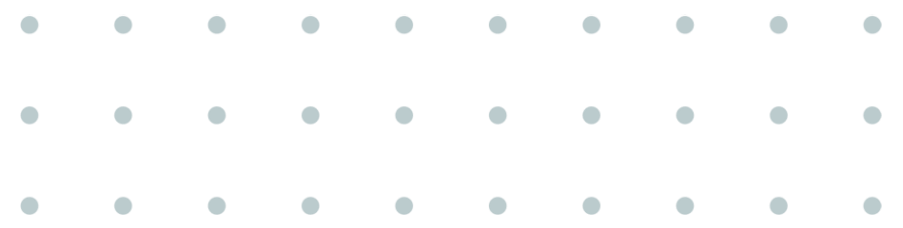




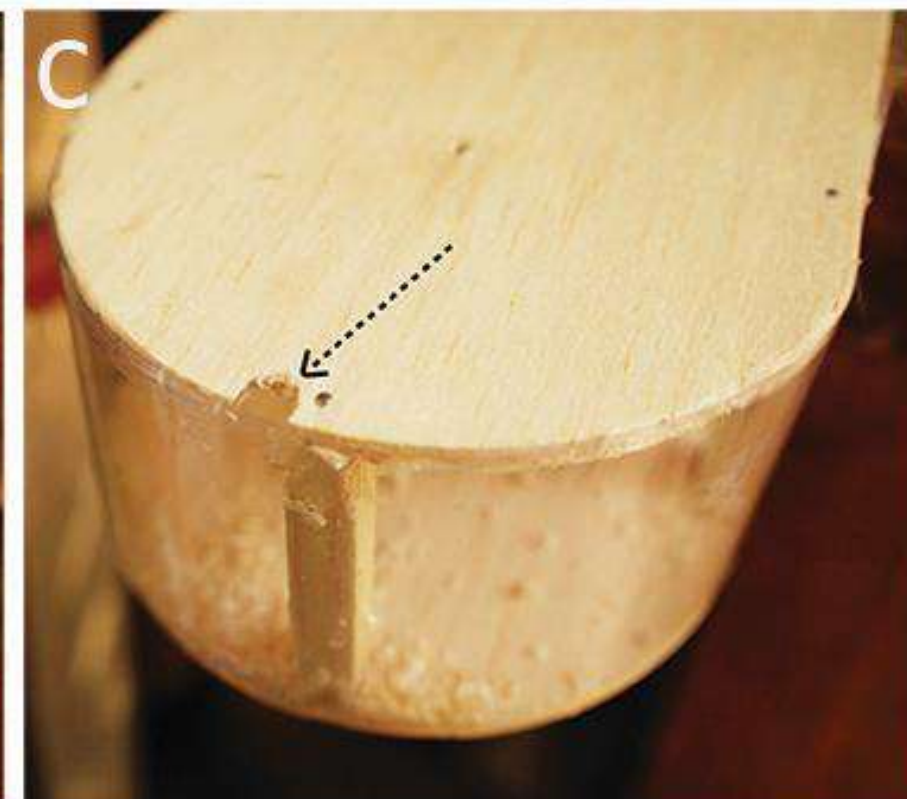
Boxes placed over the nest entrances capturing individuals emerging from the nest.

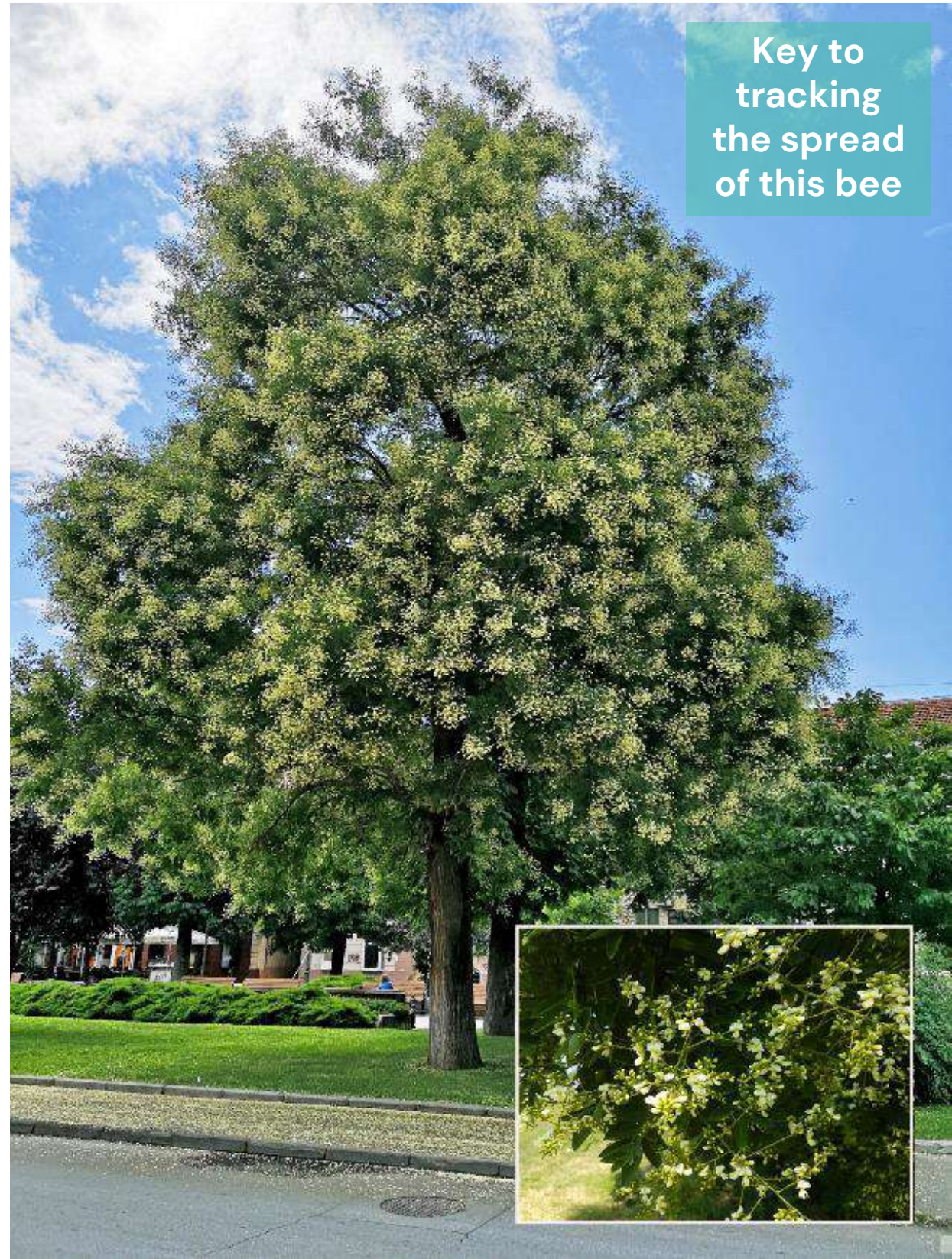


Serbia, Belgrade, 2021-2023.



Reports of the **number of individuals** emerging from the nest, their emergence patterns, the rate of their emergence, and even the sex of the individuals.





Styphnolobium japonicum
Sophora, Japanese pagoda tree

+

HAVE YOU SEEN THIS BEE?

MEGACHILE SCULPTURALIS

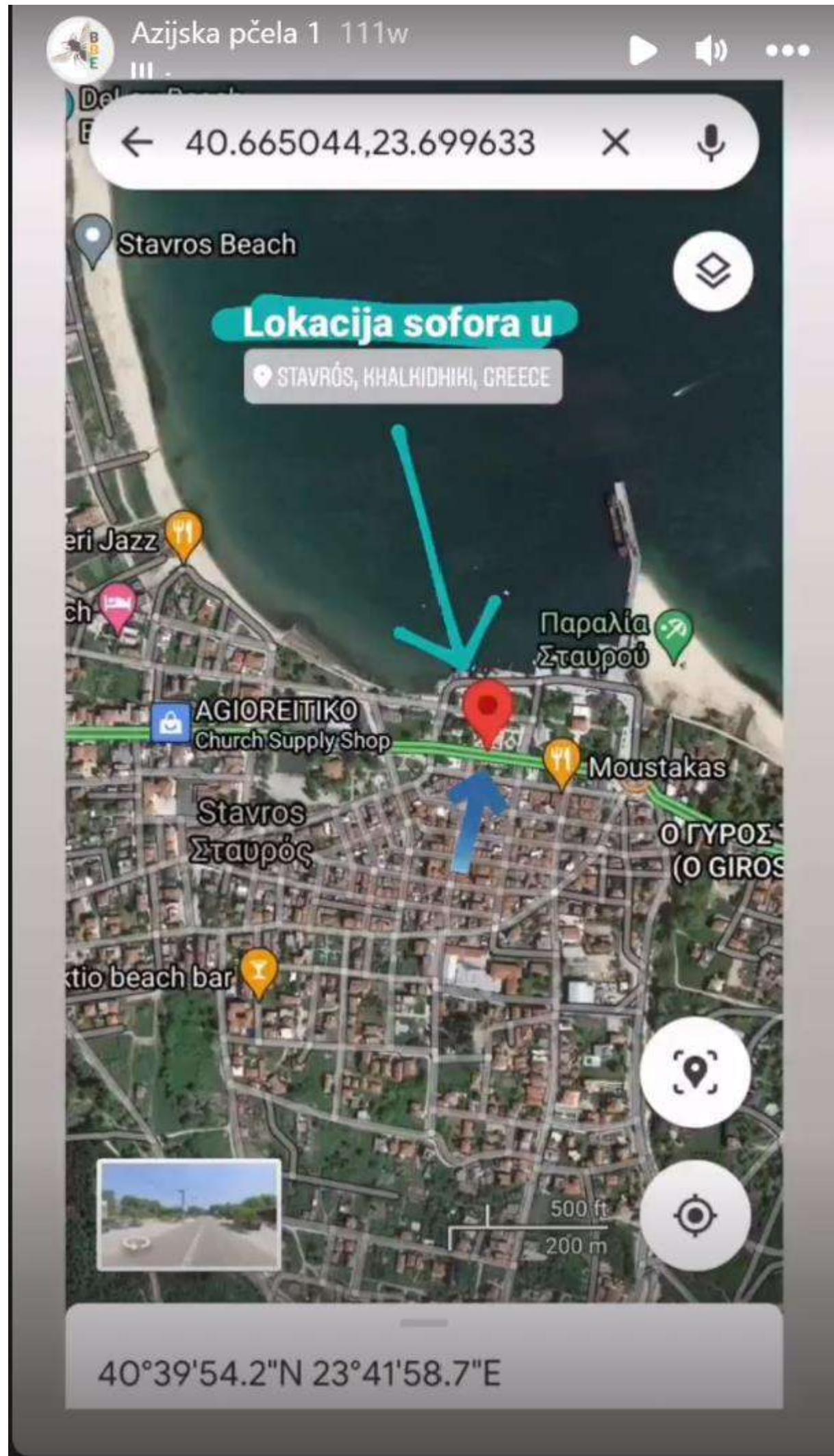
Send us a photo and location!
AZIJSKA.PCELA@BIO.BG.AC.RS

Sculptured resin bee
(Megachile sculpturalis)



[belgrade.bees.ecology](https://www.instagram.com/belgrade.bees.ecology)





2021.
Thanks to their efforts, I was able to get **reliable information on the ground** without having to organize a trip to Stavros myself.



How to address
and **connect** to
people you are
talking to

How to see **their
perspective**

People will remember **how they
feel** while doing something: show
them how important their help is
and recognize their contribution

**Who is behind the
information/message?** Only then
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Power of citizen science



While my journey into citizen science began in parks and through random encounters, it has grown into a key part of my work. I've seen firsthand how engaging with the public can lead to breakthroughs and foster a deeper connection between people and nature. It's not just about collecting data; it's about **empowering individuals to feel part of something larger and to contribute** to the preservation of our natural world.

Turning curiosity into action, and action into change.



Thank you

Questions?

Dr Jovana Bila Dubaić

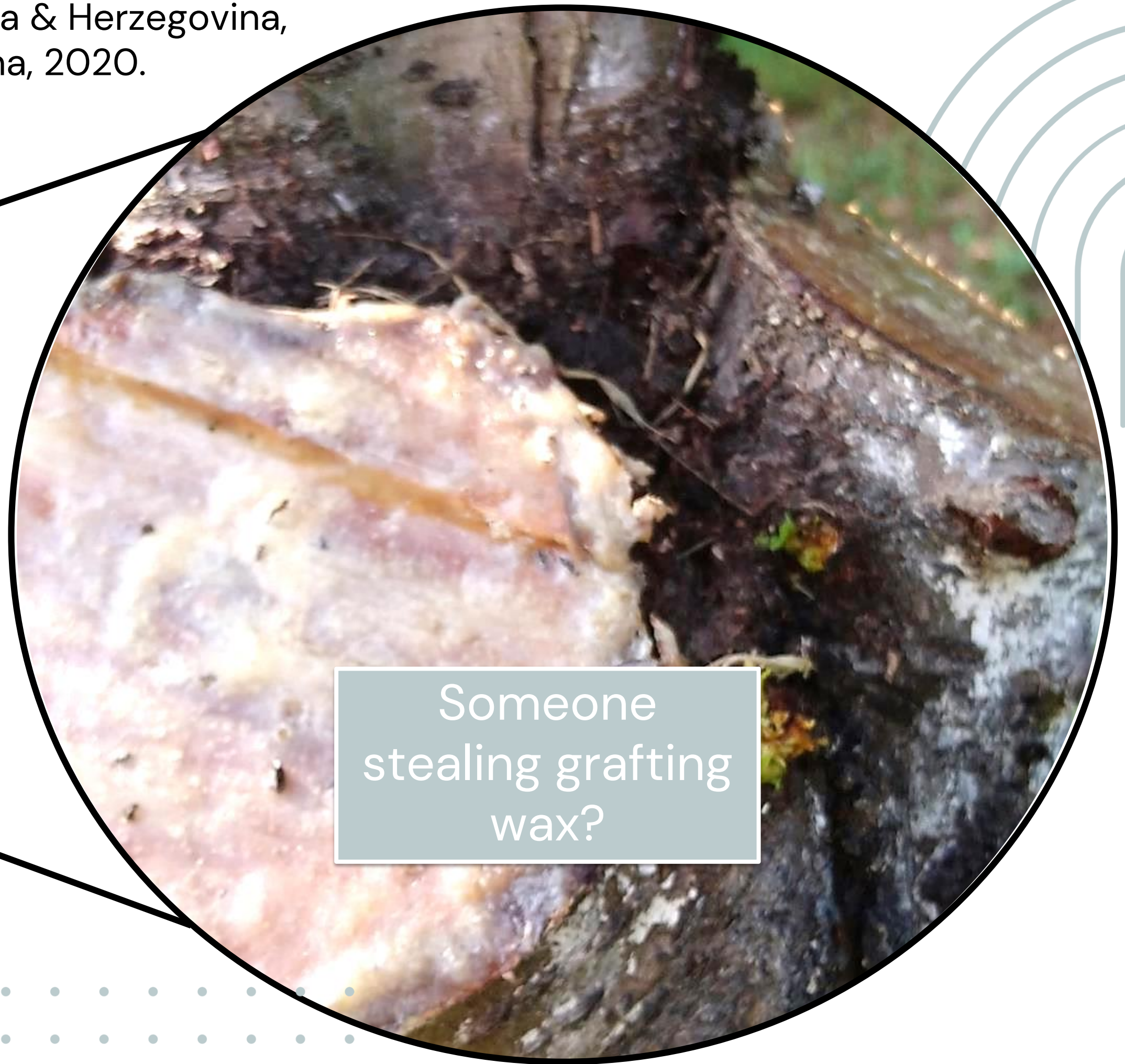
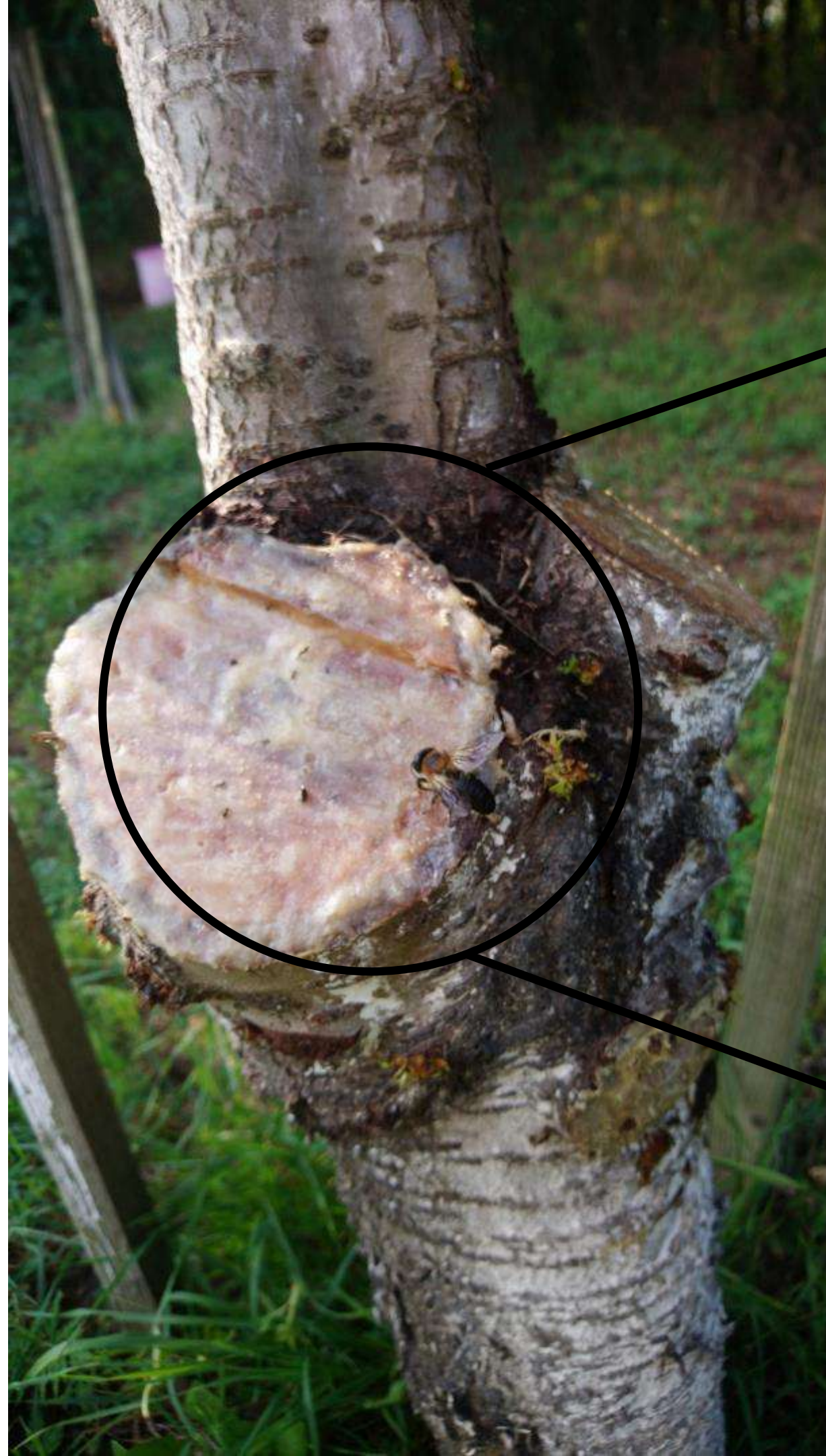
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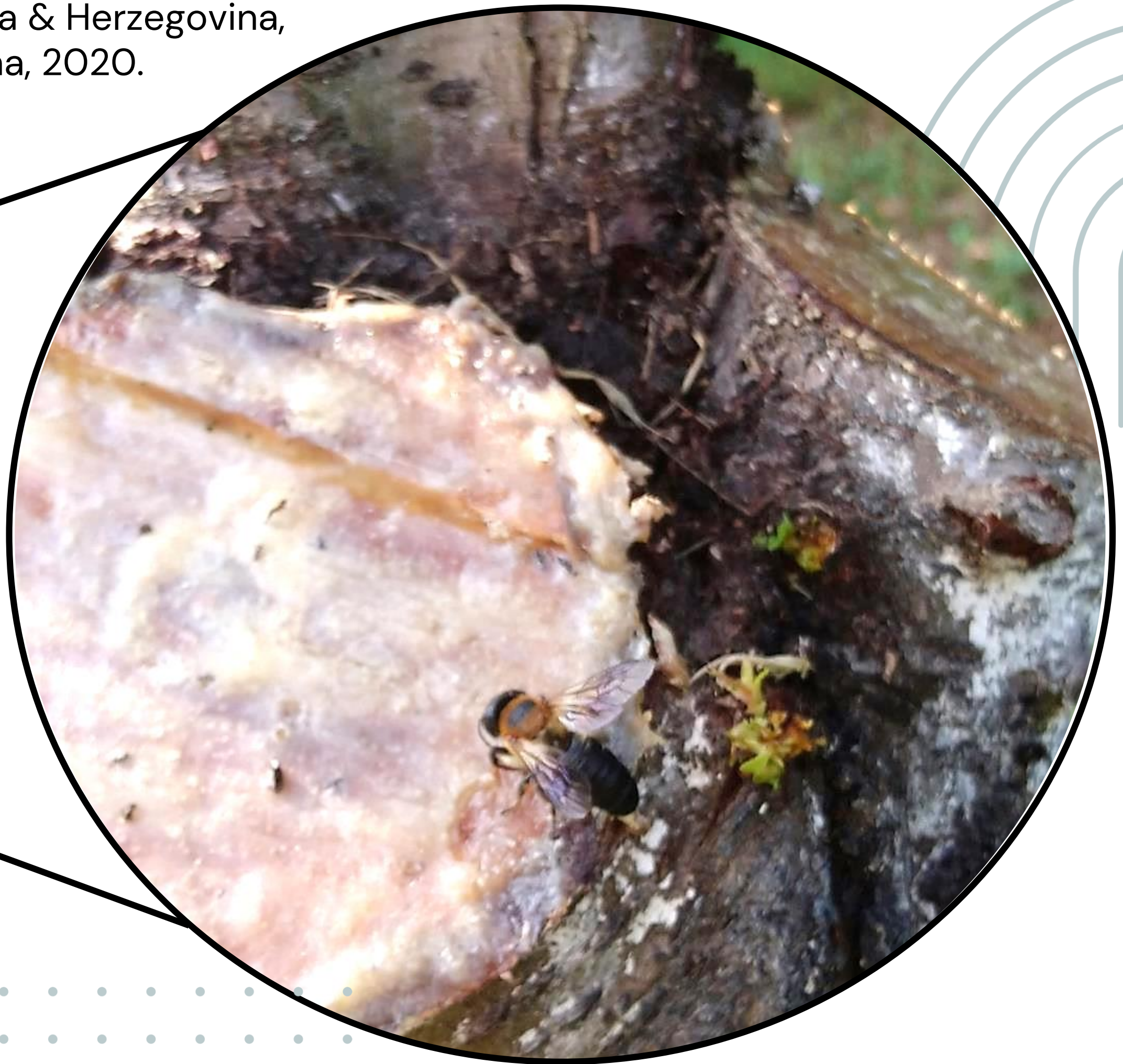
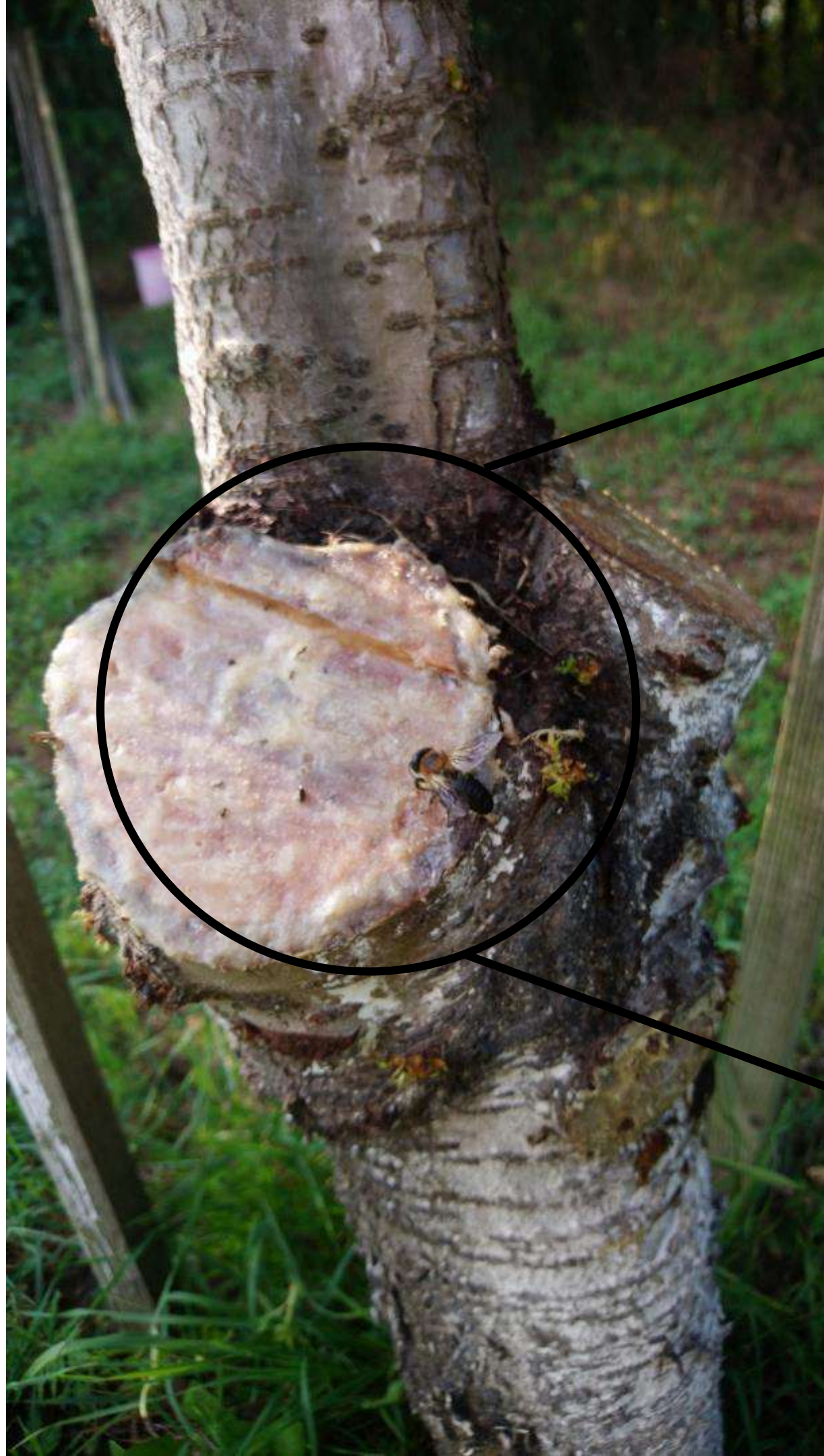
Bosnia & Herzegovina,
Bjeljina, 2020.



Someone
stealing grafting
wax?



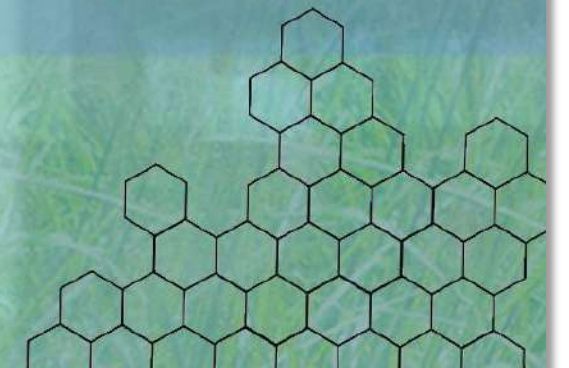
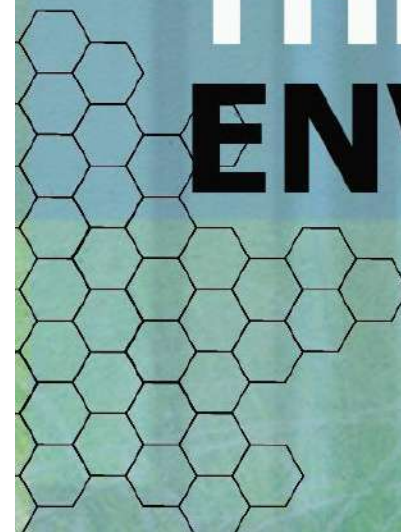
Bosnia & Herzegovina,
Bjeljina, 2020.



Free-living honey bees in Belgrade



FREE-LIVING HONEY BEES
**THRIVING IN URBAN
ENVIRONMENT**

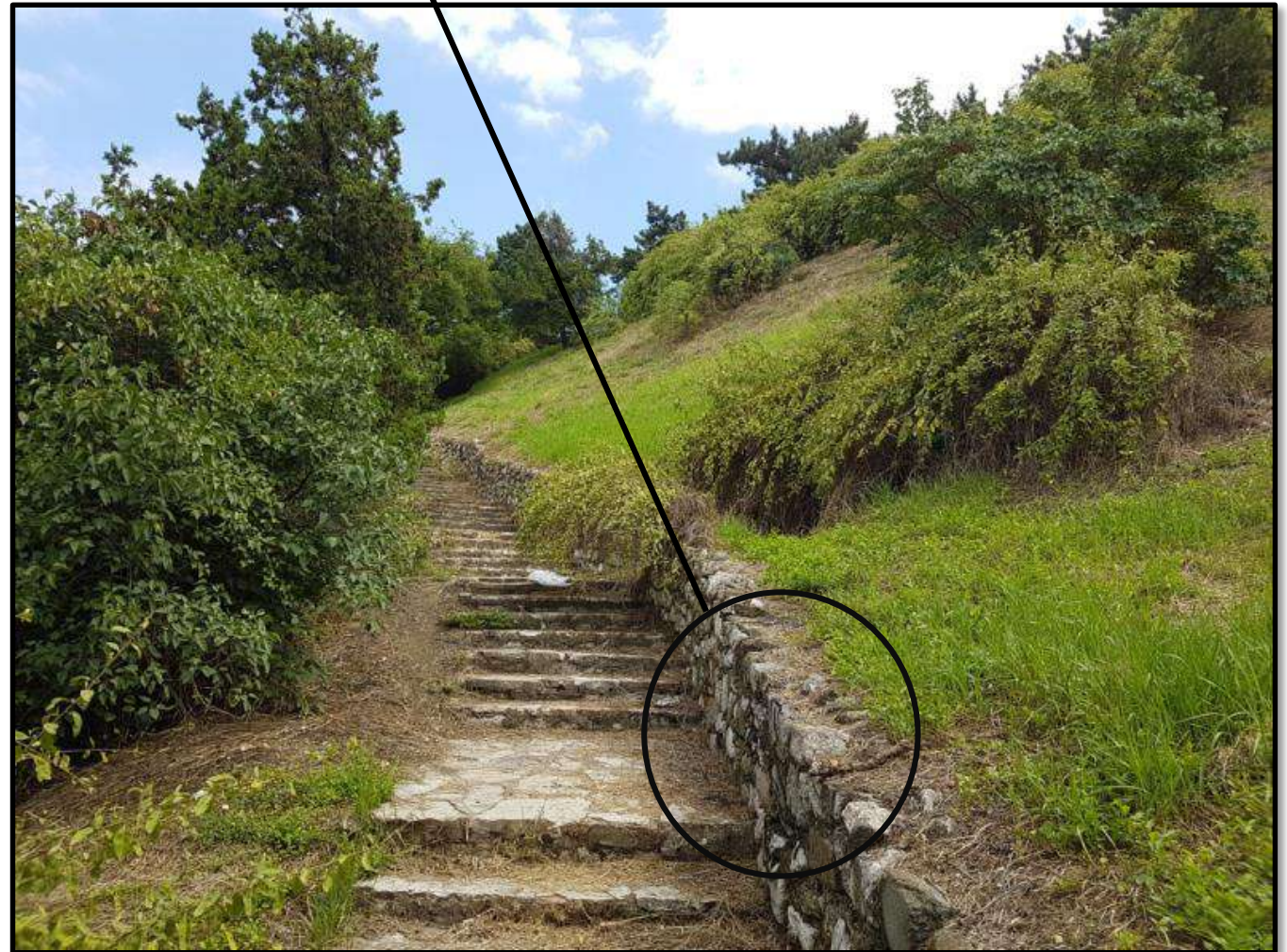


Free-living honey bees in Belgrade

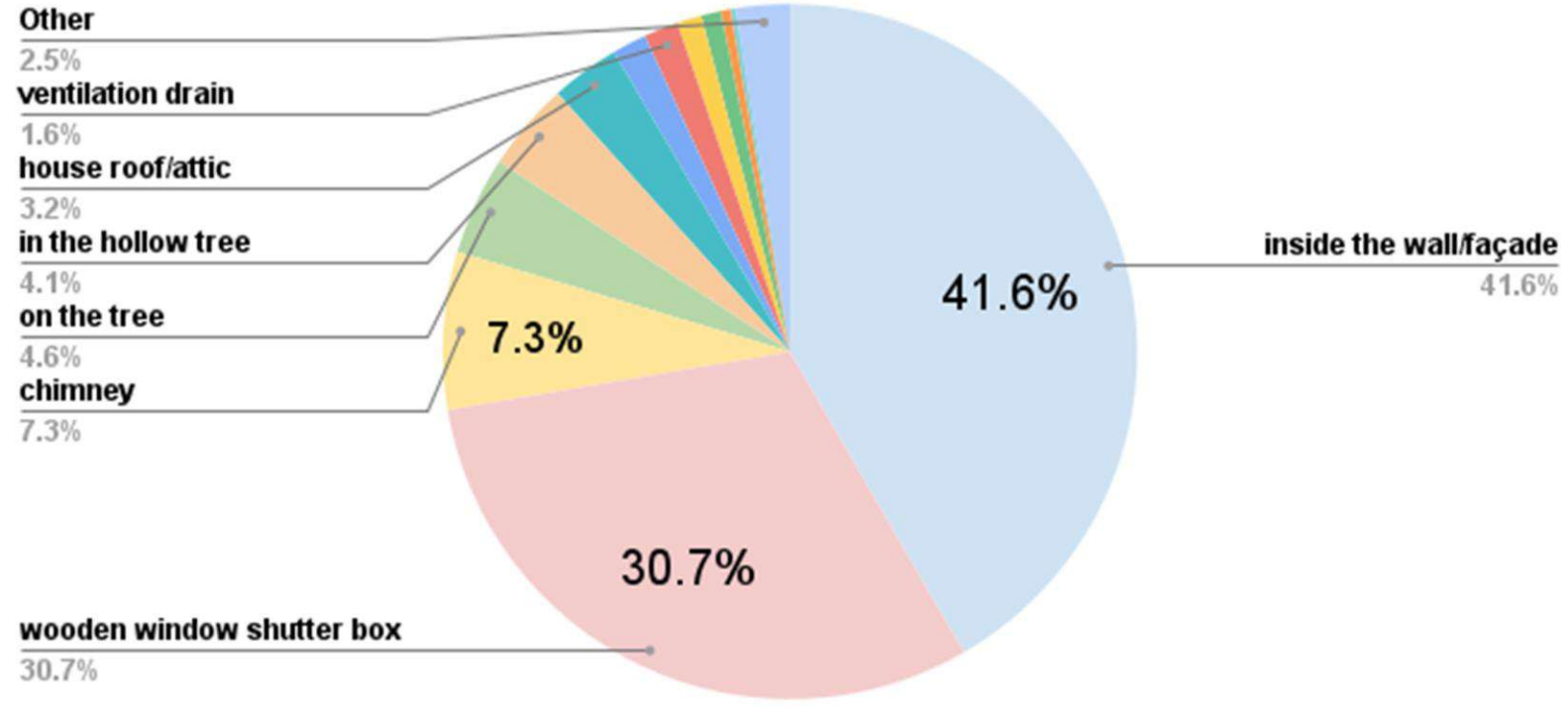




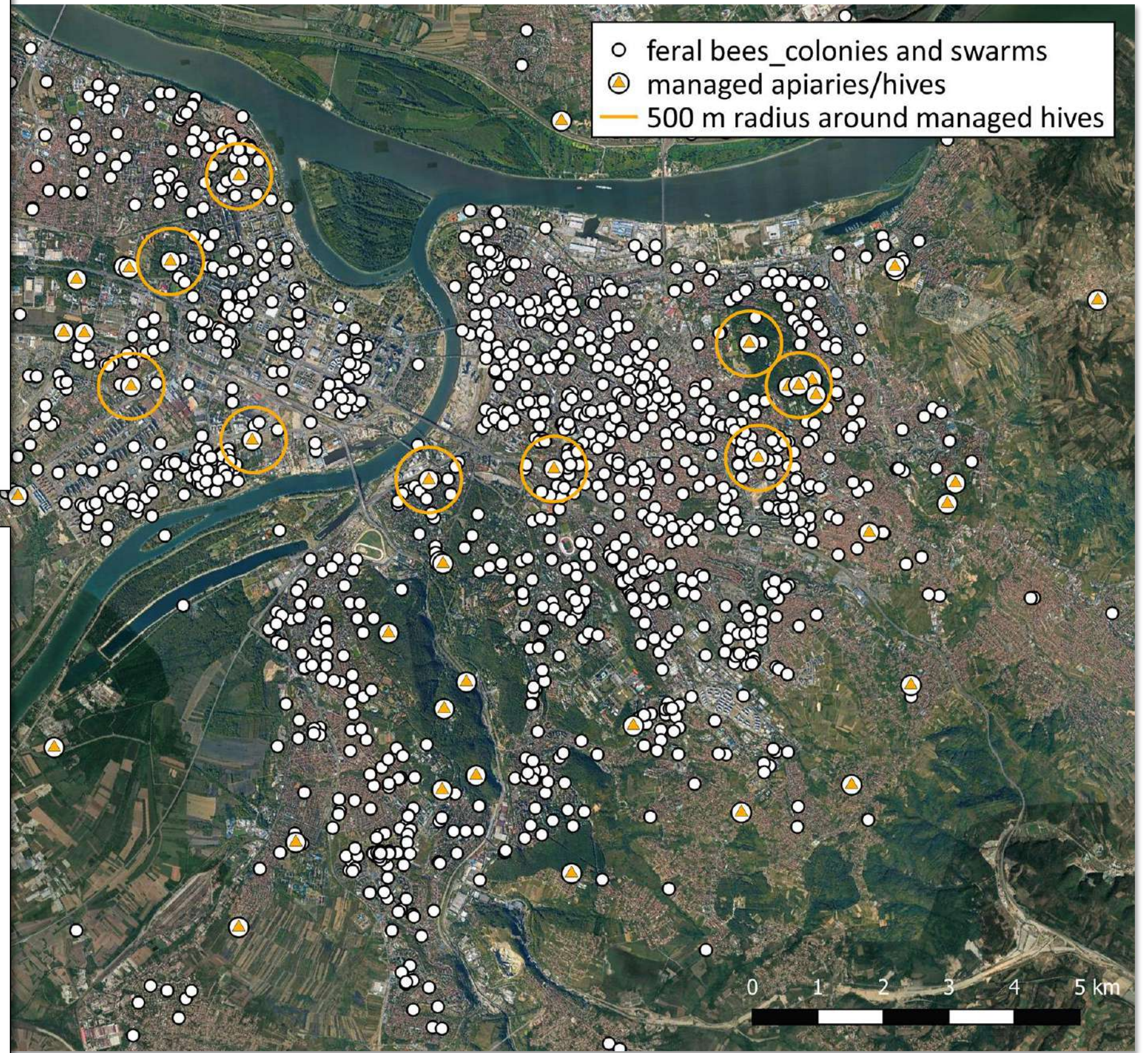
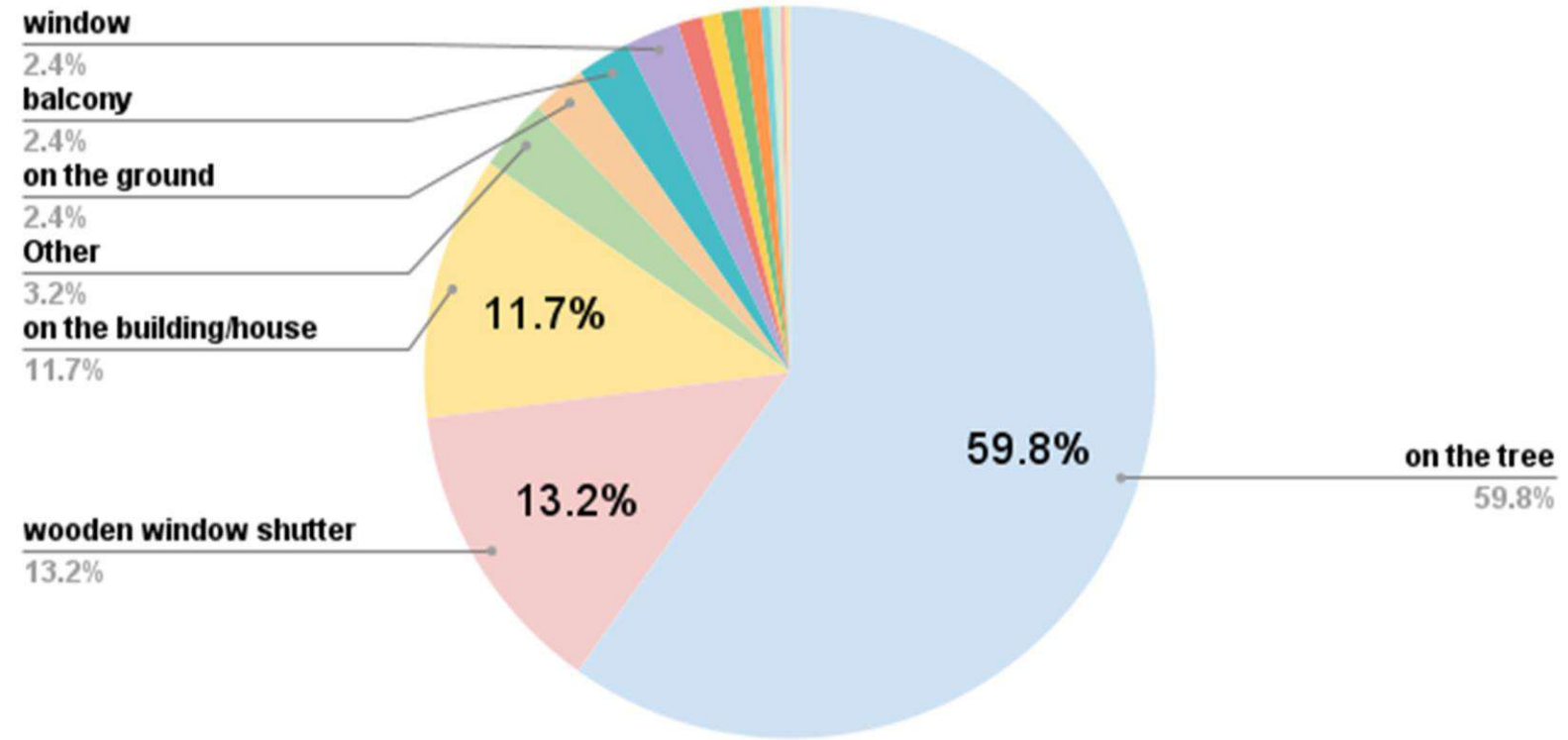




Nesting sites



Swarming sites



Belgrade, period of 2011–2017