



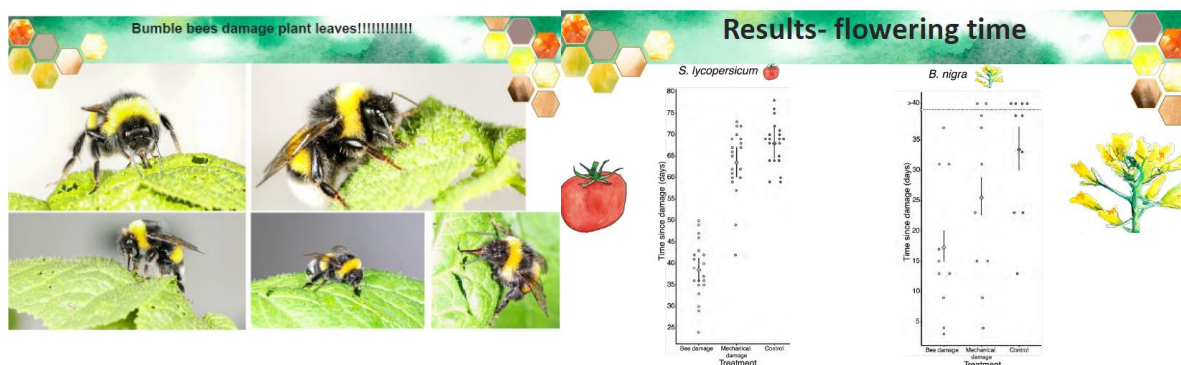
METABIO - Café PIAHealth



Bumble bees damage plant leaves and accelerate flower production when pollen is scarce

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Mots-clefs : bumble bees, induced flowering, behaviour, pollen availability



Résumé :

Maintaining phenological synchrony with flowers is a key ecological challenge for pollinators that may be exacerbated by ongoing environmental change. Here, we show that bumble bee workers facing pollen scarcity damage leaves of flowerless plants and thereby accelerate flower production. Laboratory studies revealed that leaf-damaging behavior is strongly influenced by pollen availability and that bee-damaged plants flower significantly earlier than undamaged or mechanically damaged controls. Subsequent outdoor experiments showed that the intensity of damage inflicted varies with local flower availability; furthermore, workers from wild colonies of two additional bumble bee species were also observed to damage plant leaves. These findings elucidate a feature of bumble bee worker behavior that can influence the local availability of floral resources.

Références :

Paschalidou, F.G., Lambert, H., Peybernes, T., Mescher, M.C. and De Moraes, C.M., 2020. Bumble bees damage plant leaves and accelerate flower production when pollen is scarce. *Science* 368(6493), pp.881-884.

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