

Conservación de redes de plantas y polinizadores en zonas naturales y el efecto de especies manejadas

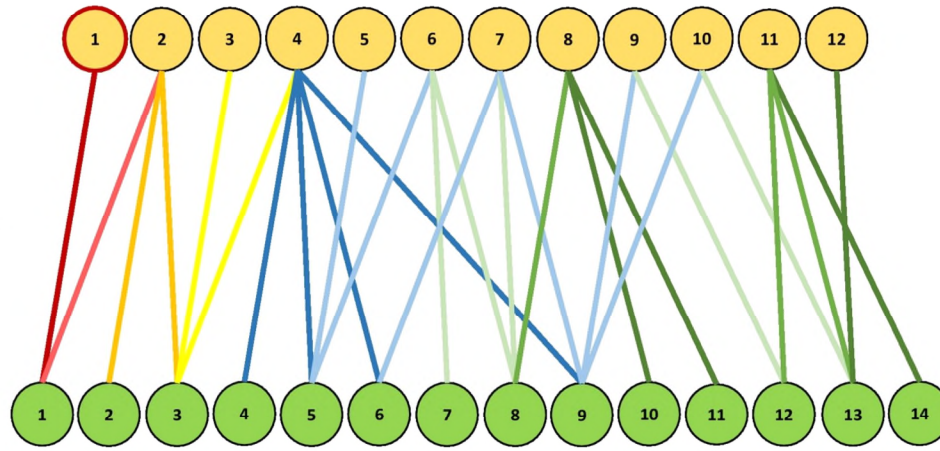
Ignasi Bartomeus



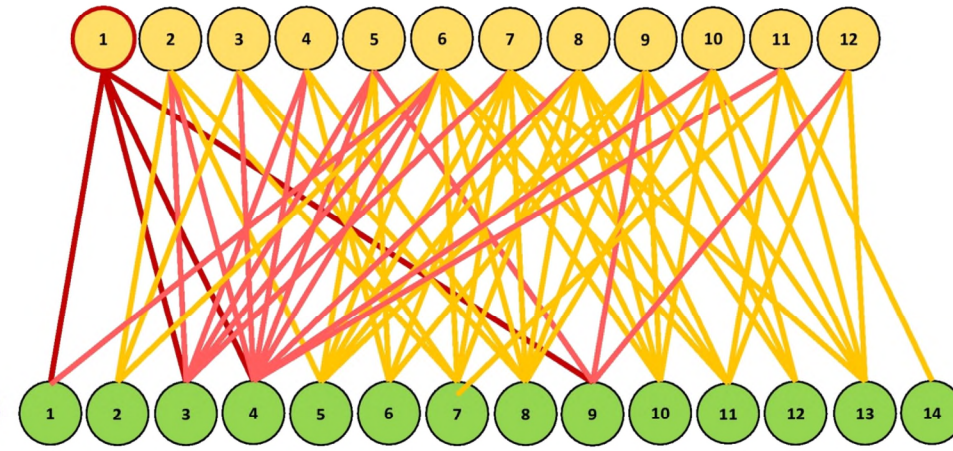
Low

High

Connectance

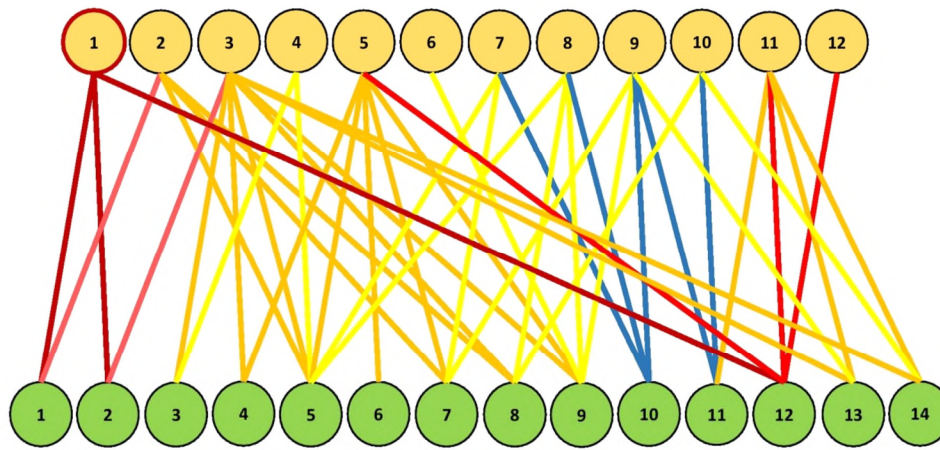


Connectance = 0.17
 NODF = 18.3
 Q = 0.57

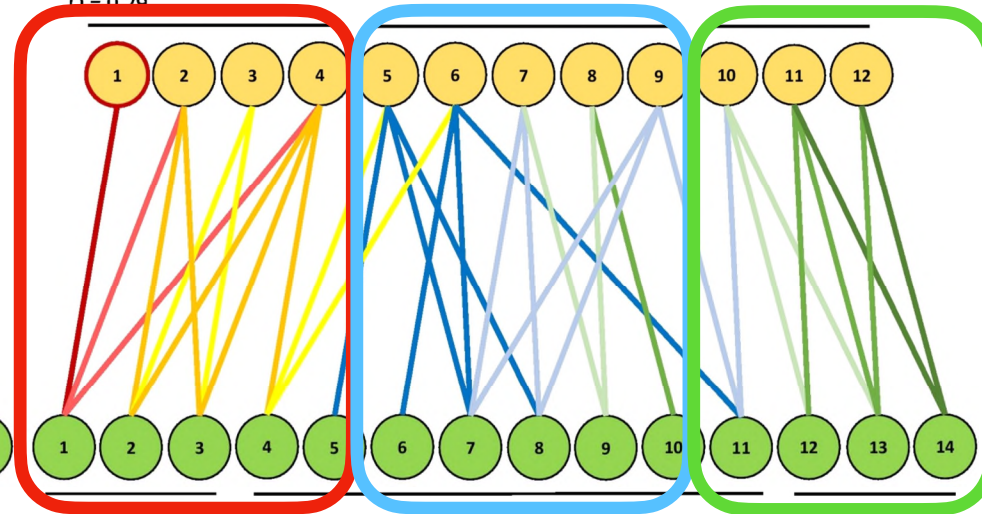


Connectance = 0.39
 NODF = 43.7
 Q = 0.29

Modularity

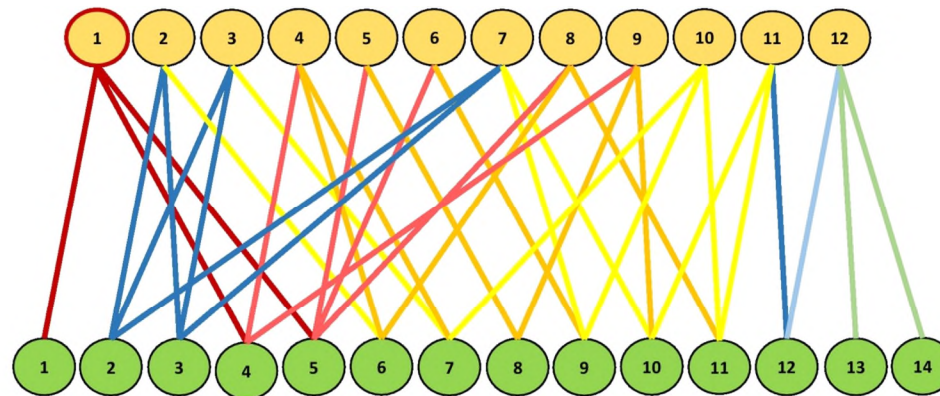


Connectance = 0.26
 NODF = 30.7
 Q = 0.36

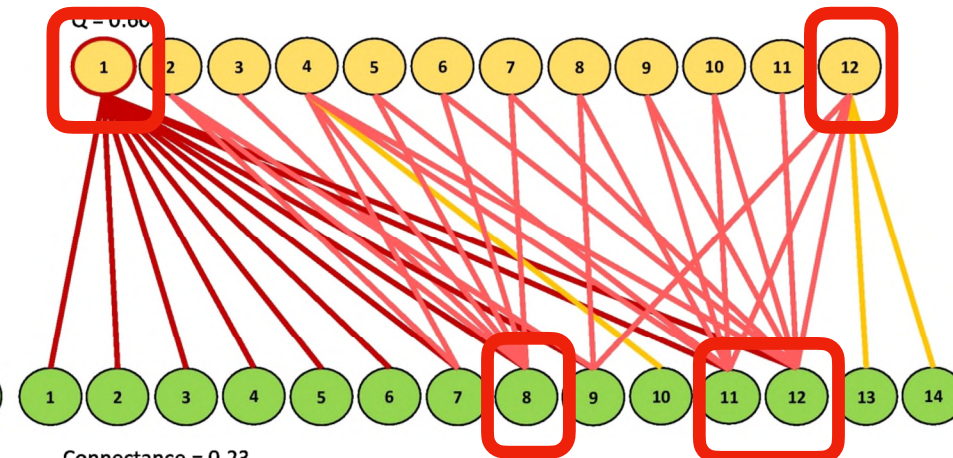


Connectance = 0.20
 NODF = 14.3
 Q = 0.60

Nestedness



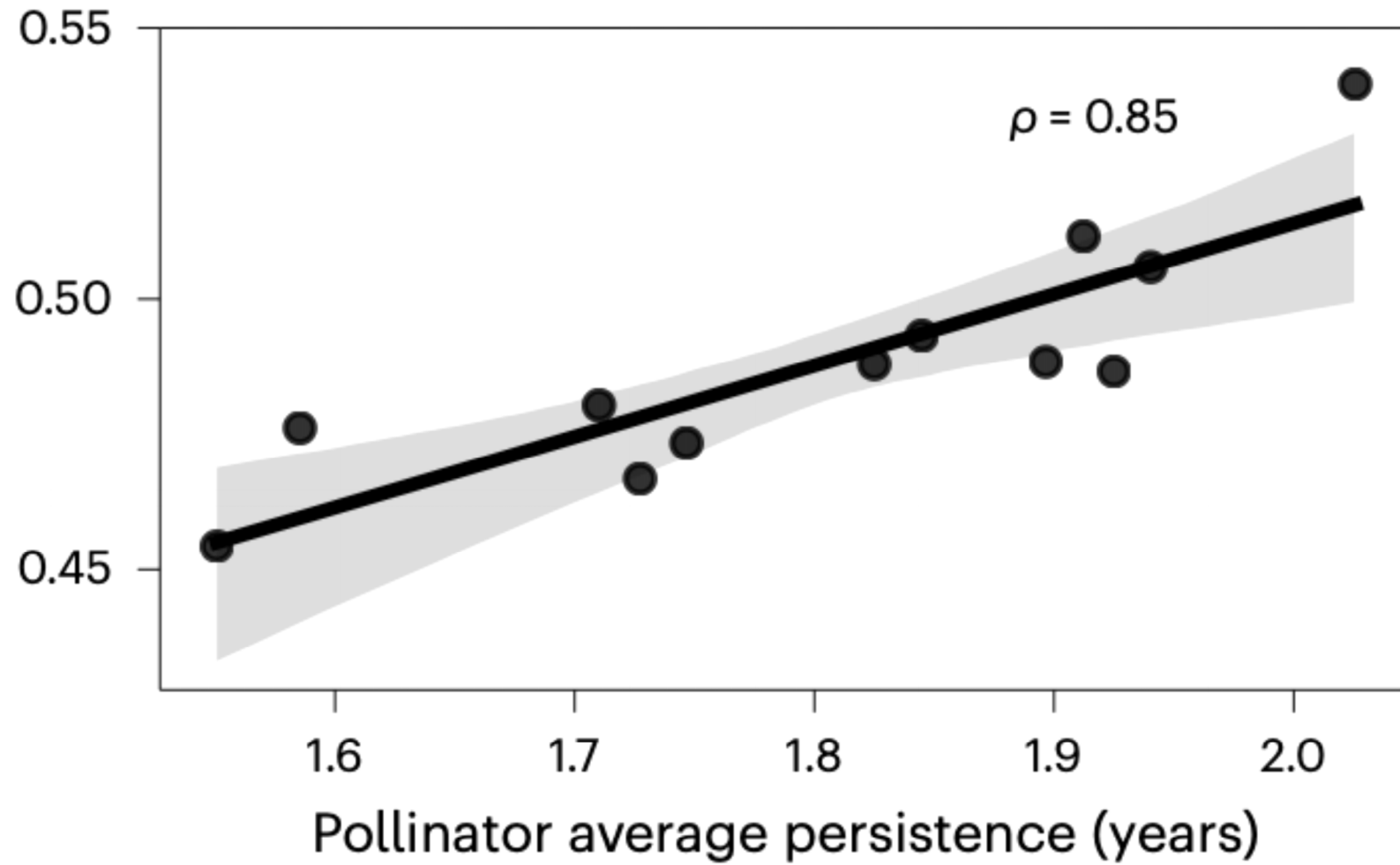
Connectance = 0.21
 NODF = 8.7
 Q = 0.49



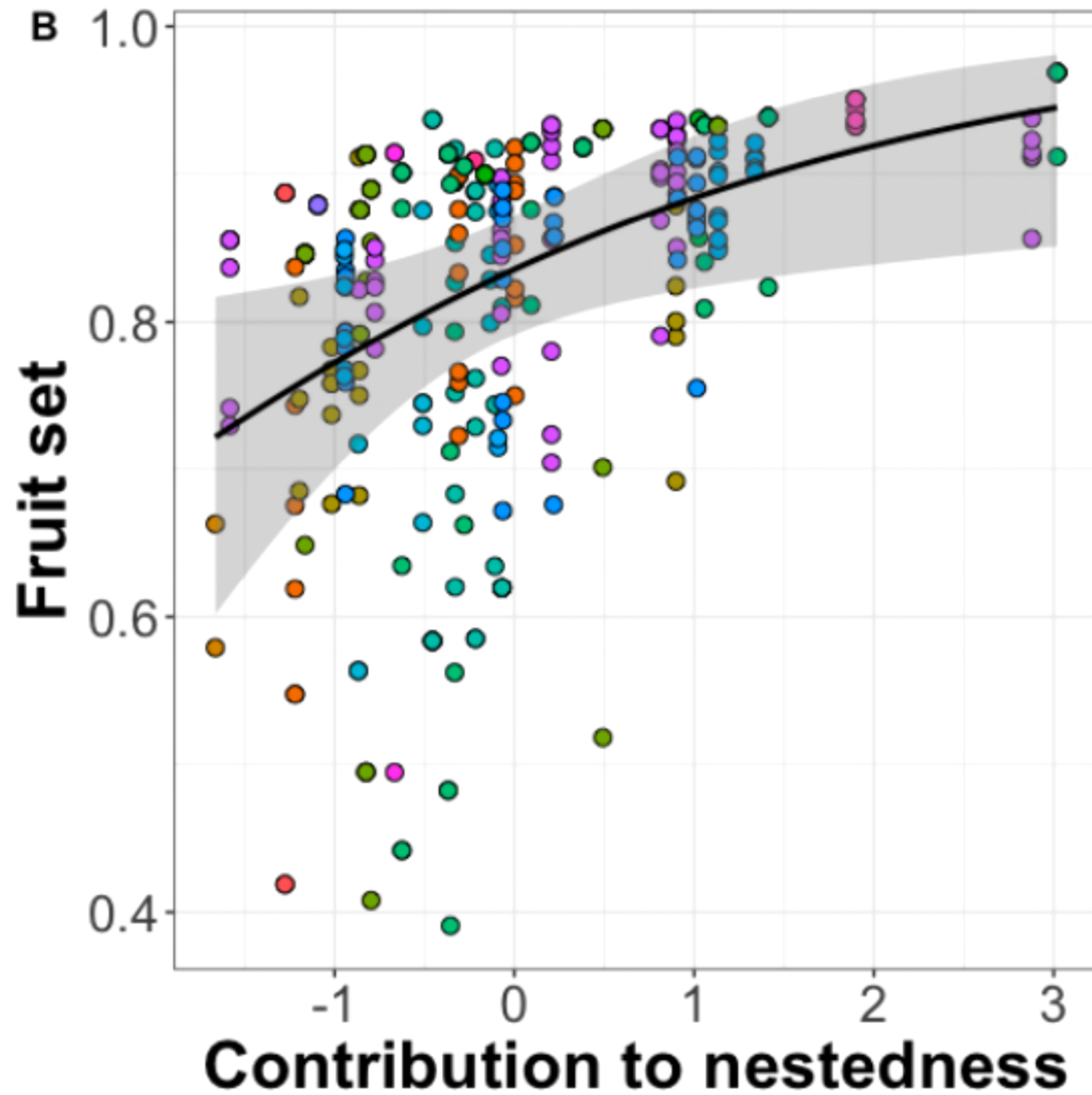
Connectance = 0.23
 NODF = 52.3
 Q = 0.40



Estabilidad

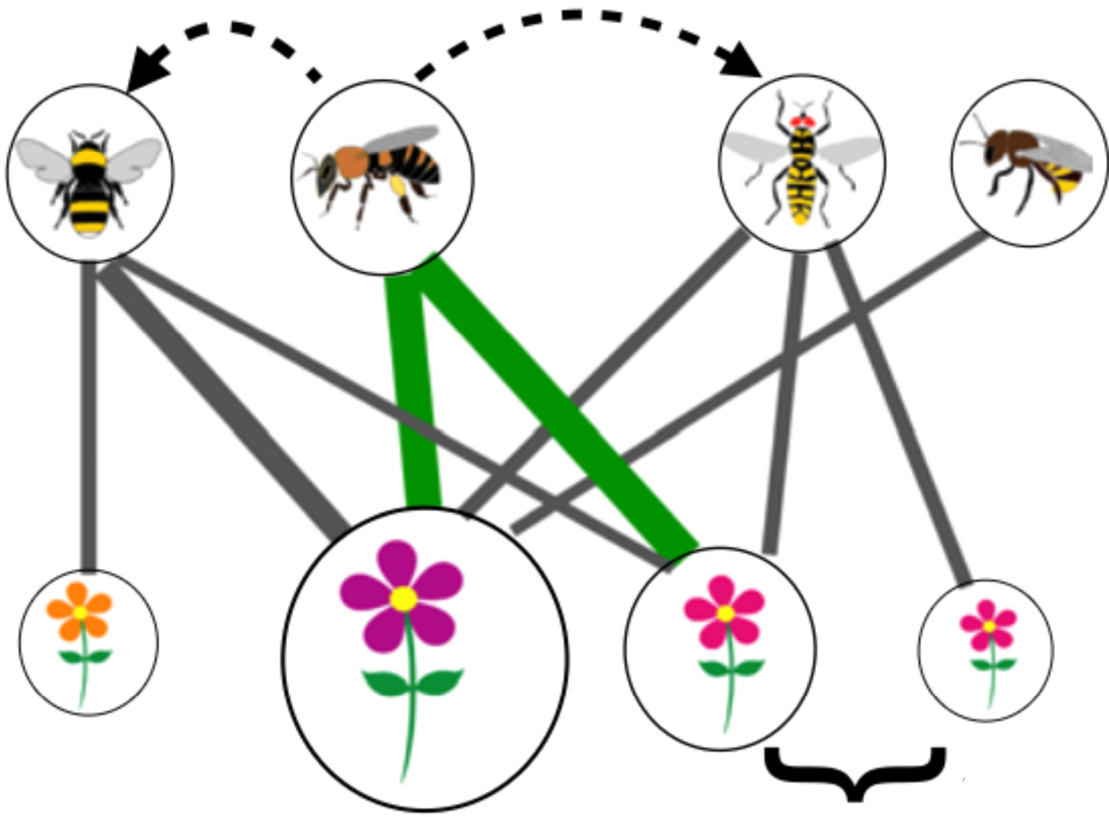


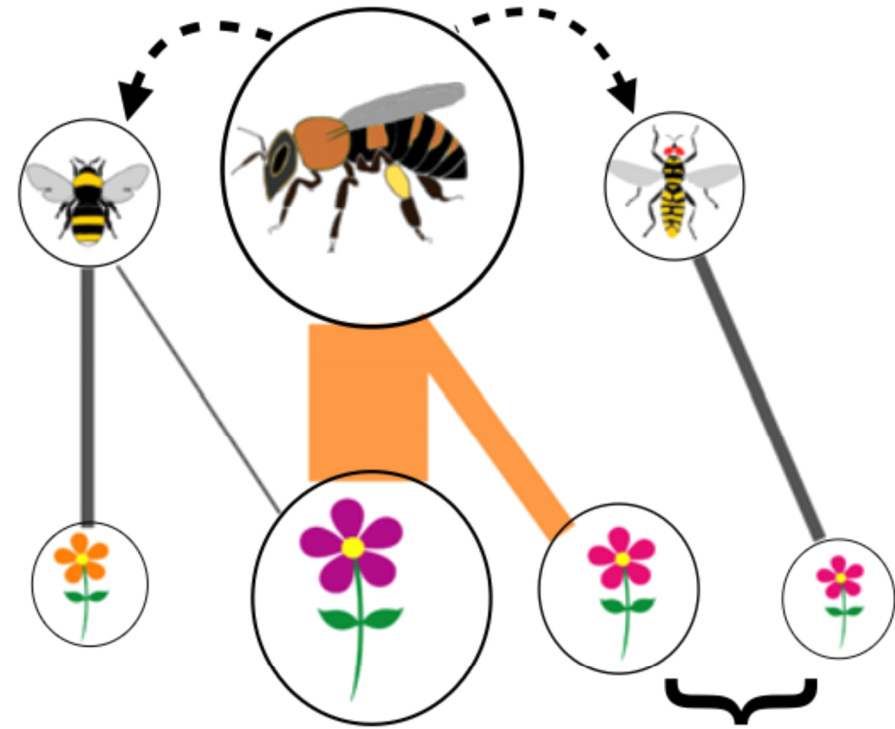
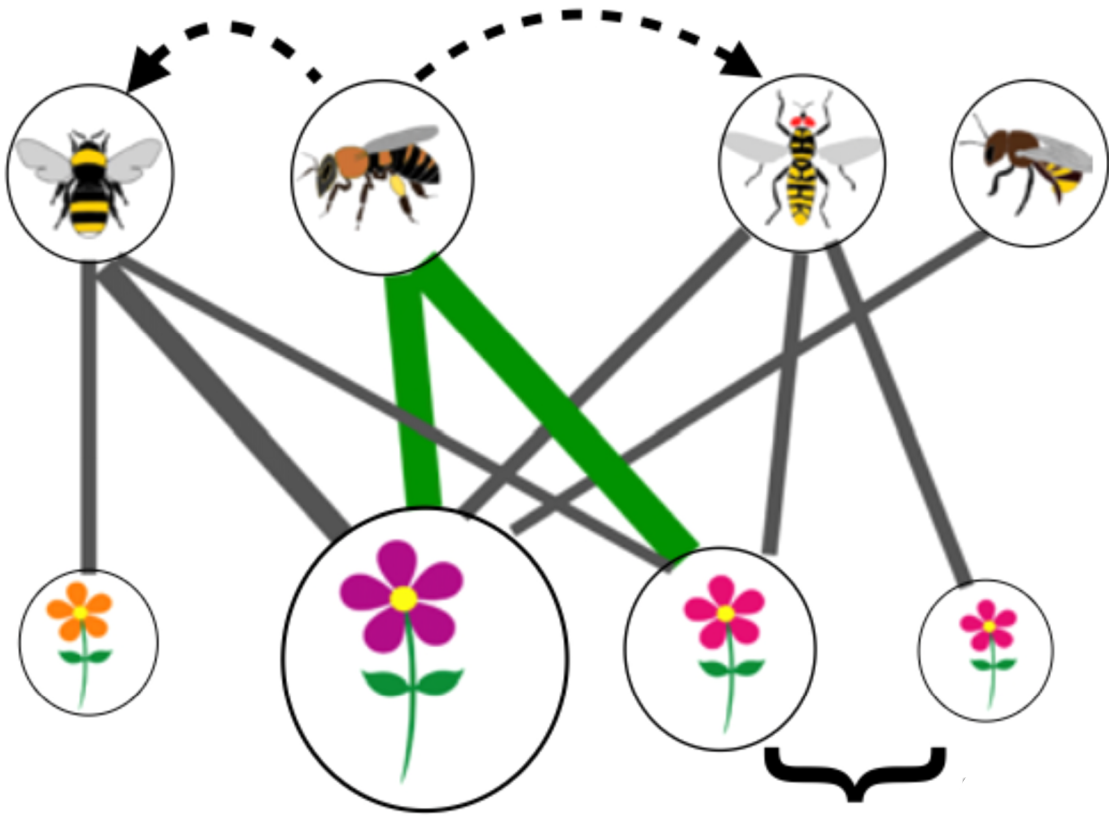
Función

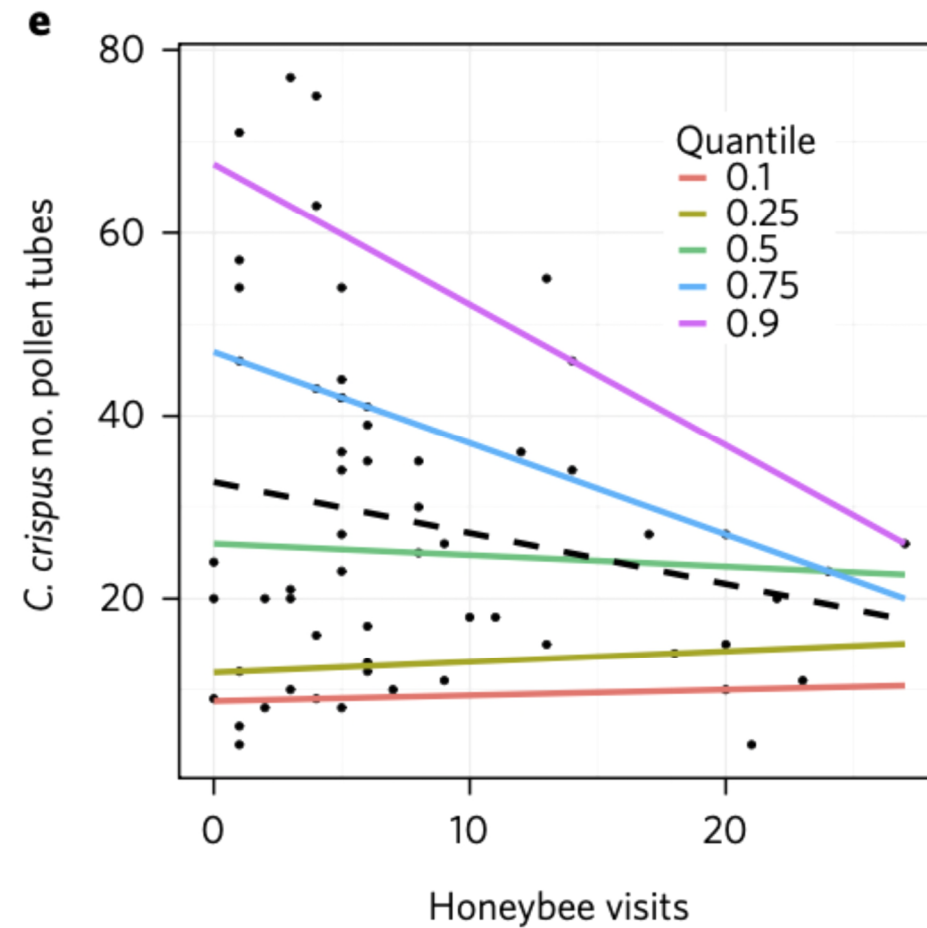
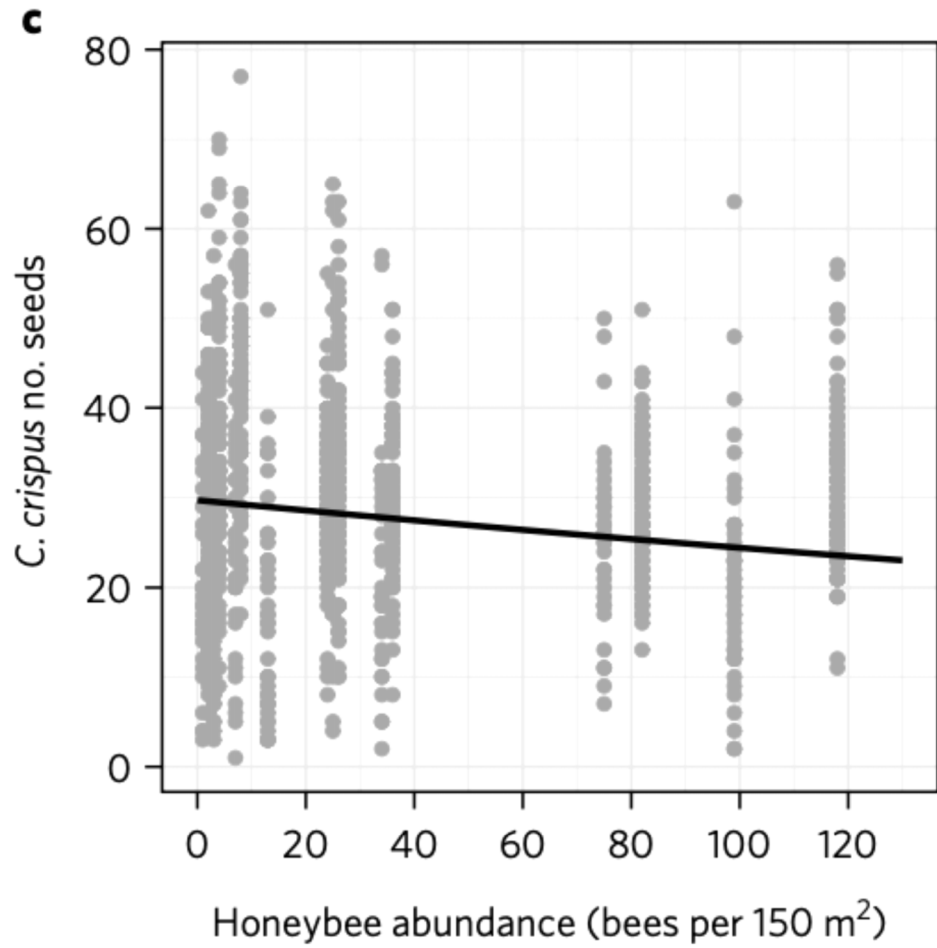
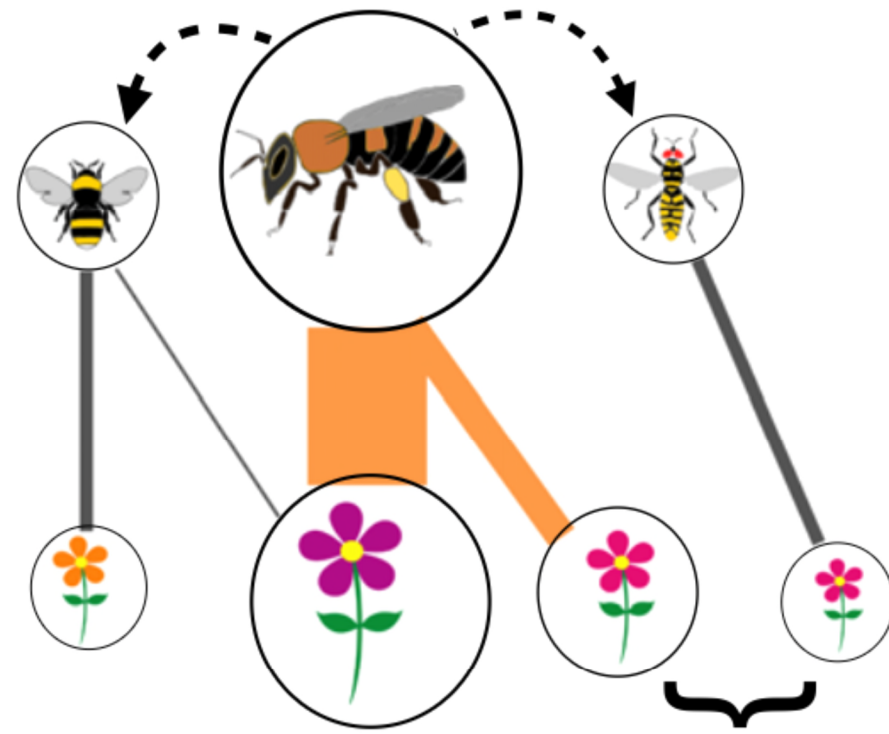
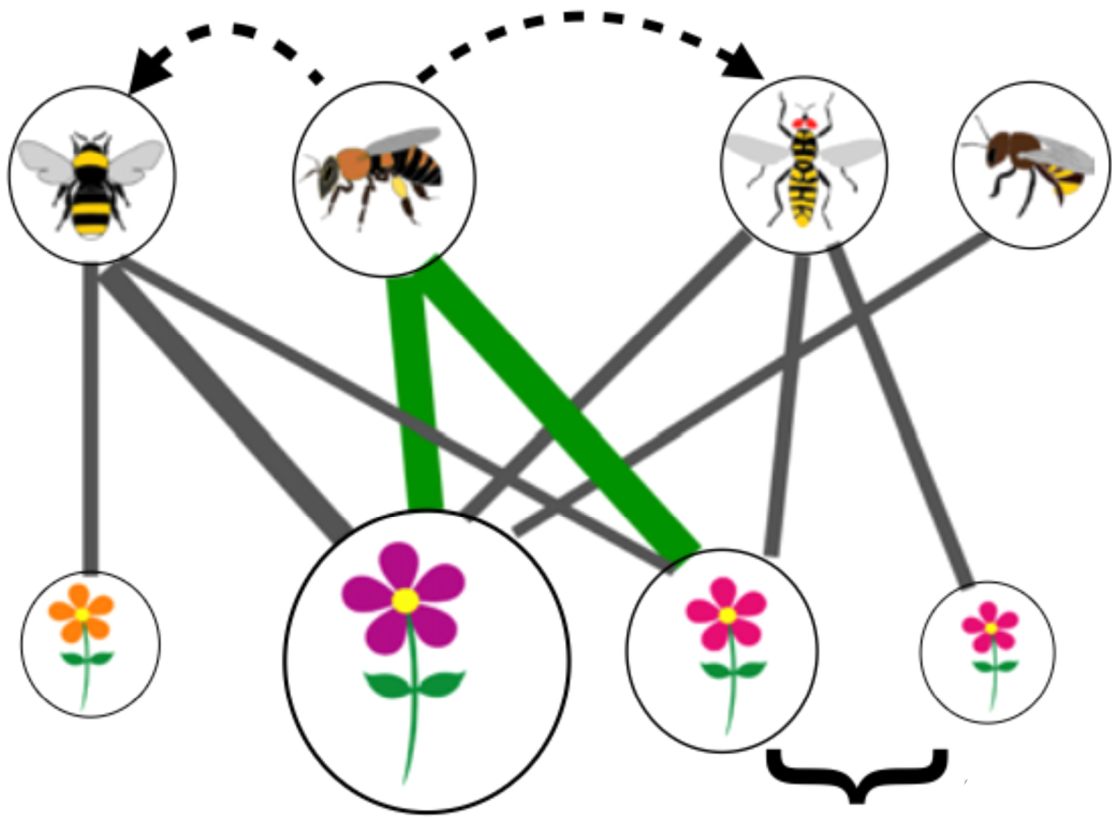


Plant species

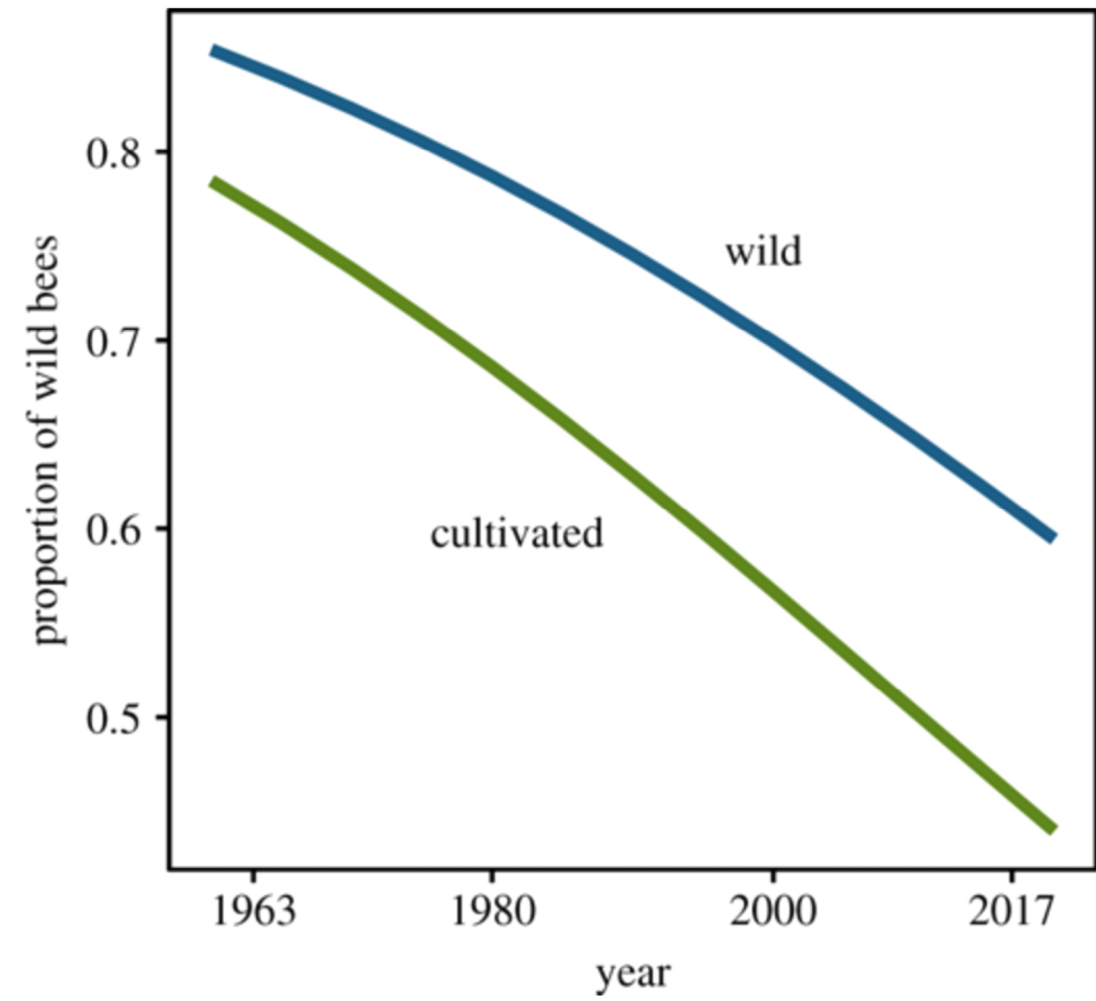
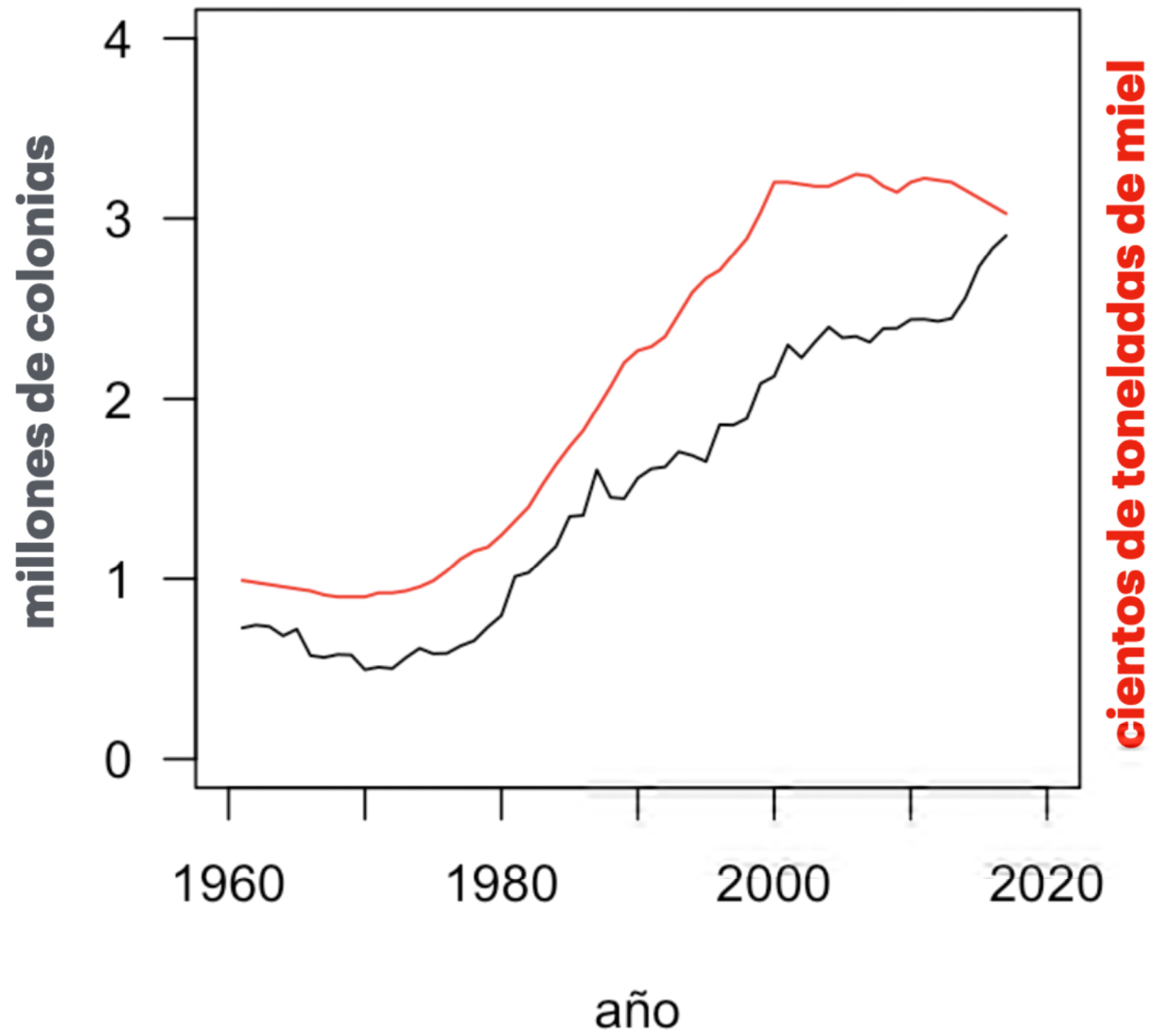
- | | | | |
|---------------------------------|--------------------------------|---------------------------------|-----------------------------|
| ● <i>Anchusa azurea</i> | ● <i>Cistus libanotis</i> | ● <i>Lavandula pedunculata</i> | ● <i>Teucrium fruticans</i> |
| ● <i>Asphodelus fistulosus</i> | ● <i>Cistus monspeliensis</i> | ● <i>Lavandula stoechas</i> | ● <i>Ulex australis</i> |
| ● <i>Astragalus lusitanicus</i> | ● <i>Cistus salvifolius</i> | ● <i>Phlomis purpurea</i> | |
| ● <i>Cistus crispus</i> | ● <i>Halimium commutatum</i> | ● <i>Rosmarinus officinalis</i> | |
| ● <i>Cistus ladanifer</i> | ● <i>Halimium halimifolium</i> | ● <i>Spartium junceum</i> | |

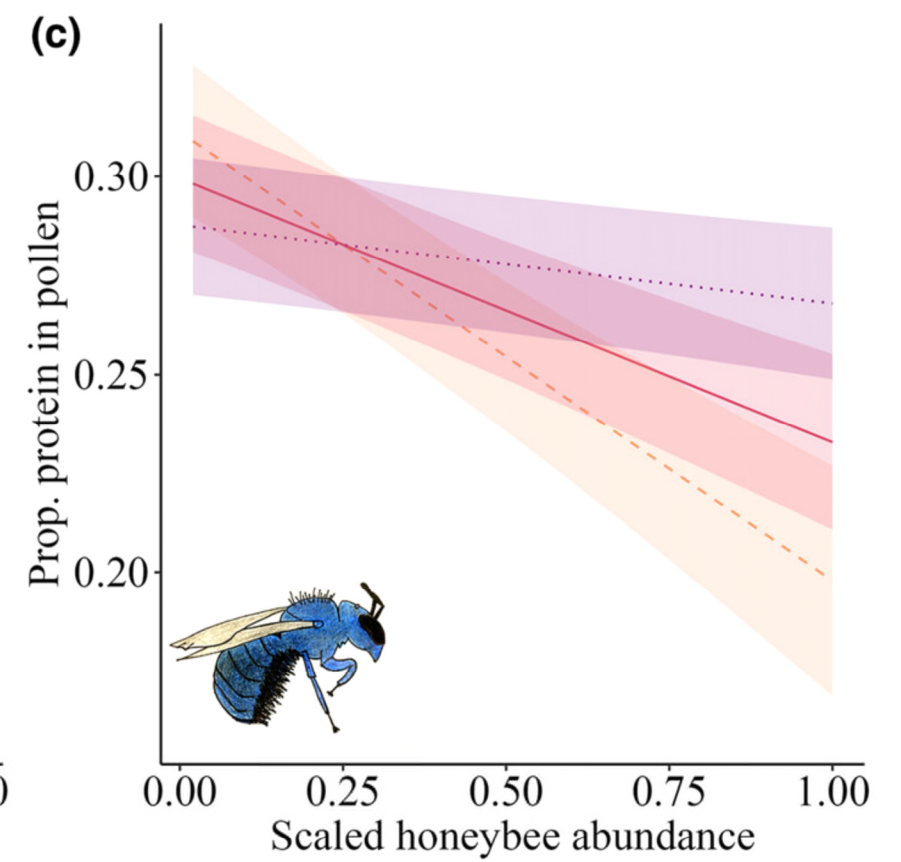
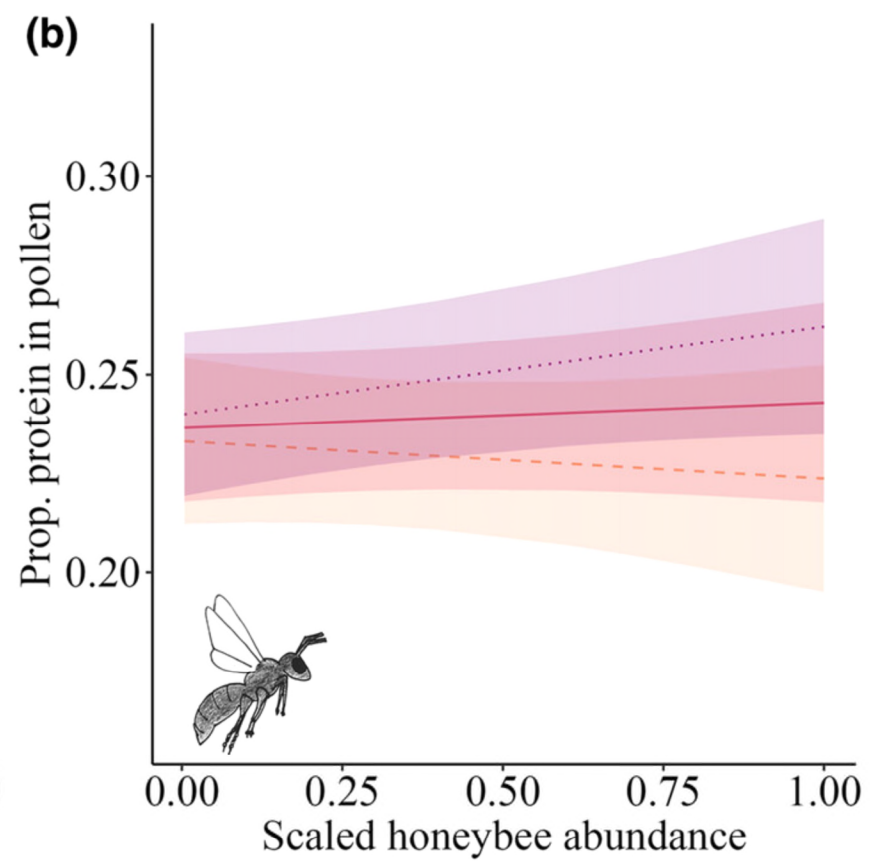
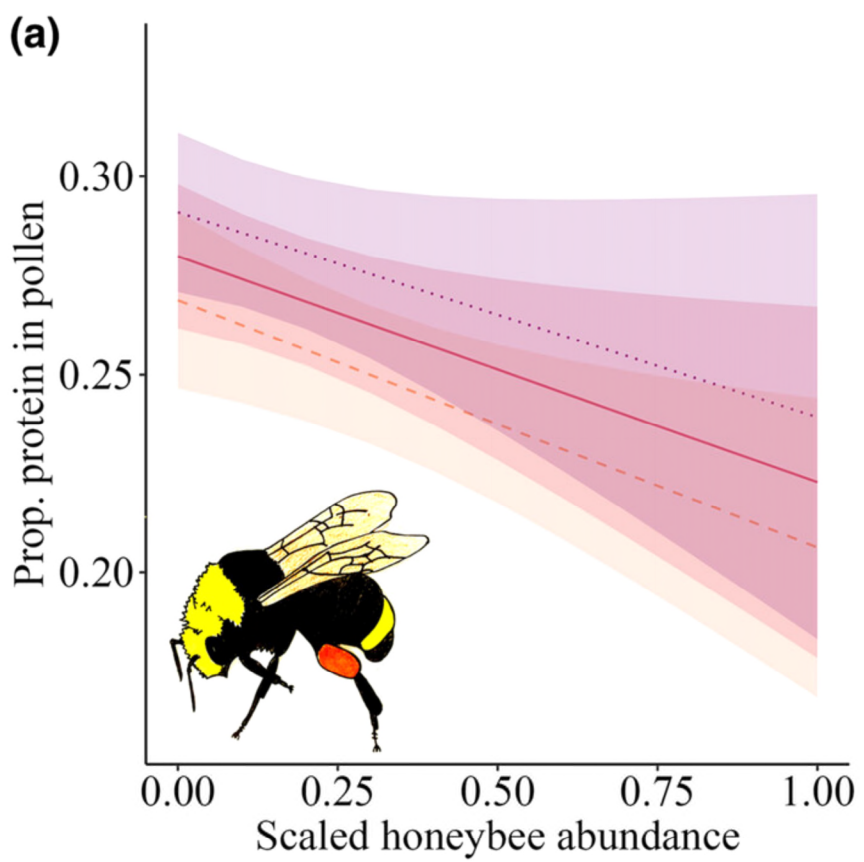






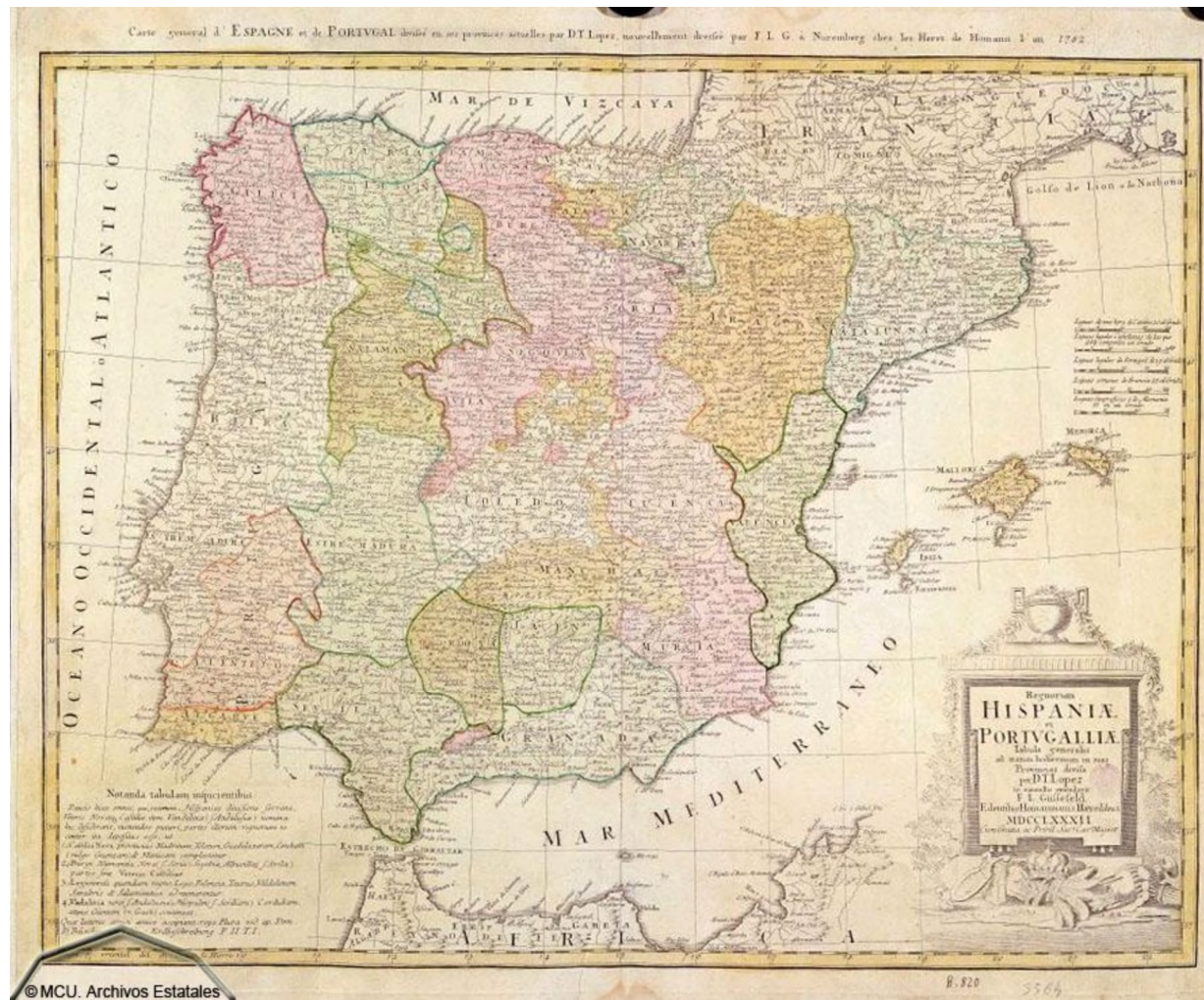
¿Es esto un problema?





**¿es posible poner
umbrales?**

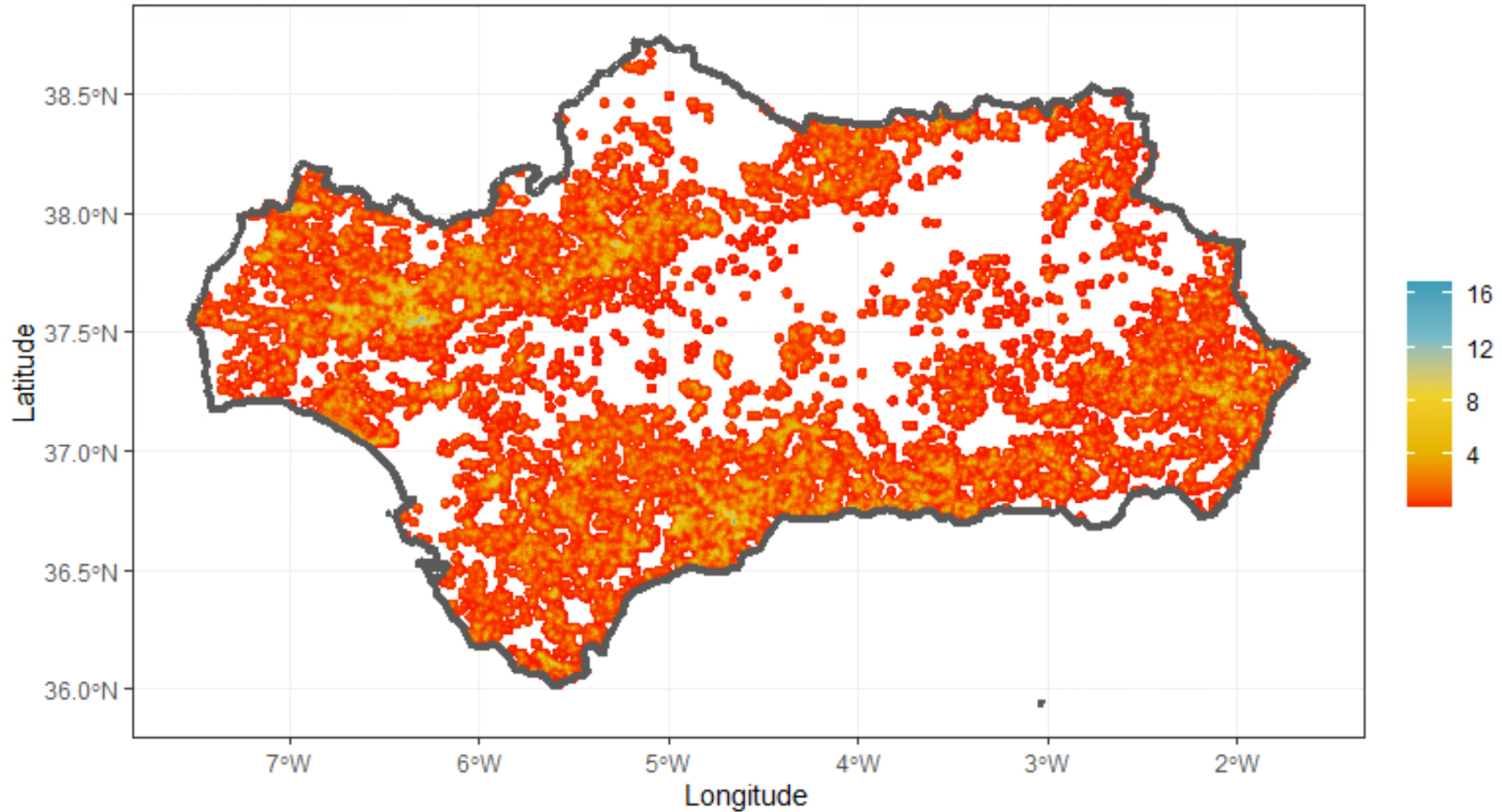
Catastro de Ensenada: siglo XVIII



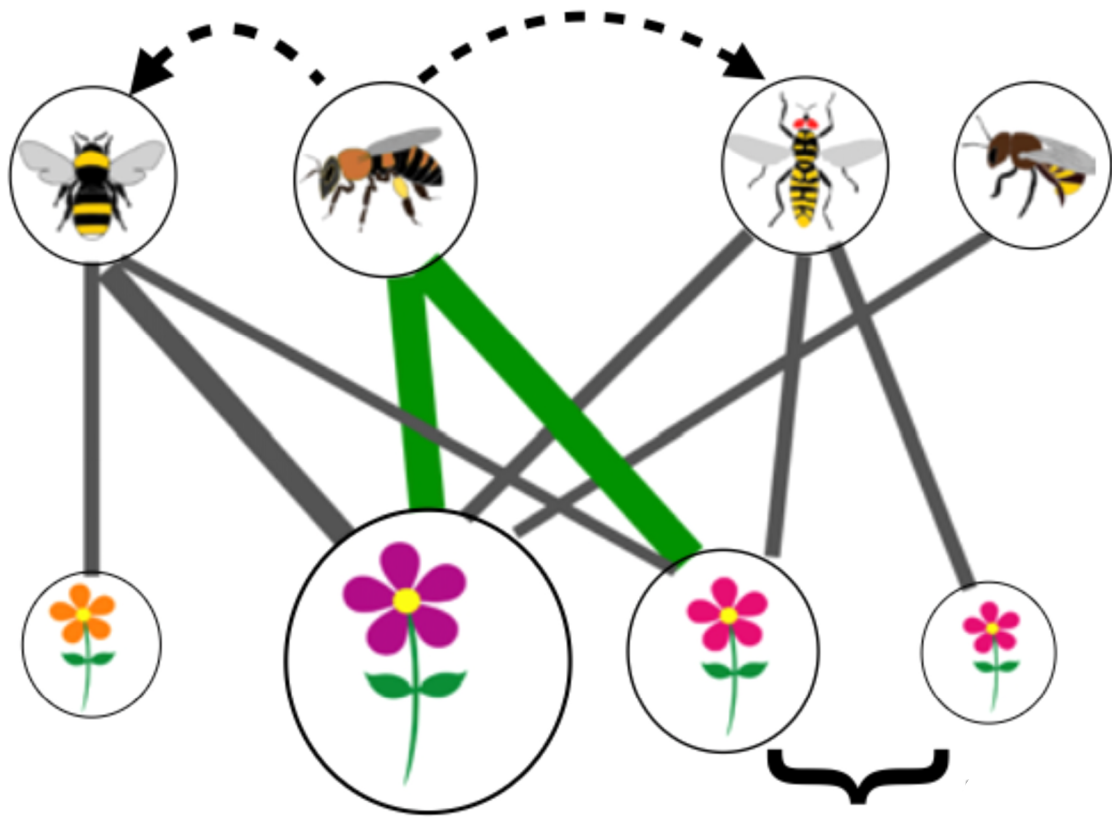
“En Andalucía había ~ 270000 colmenas en manos seculares y ~ 100000 en manos de la iglesia” = 370.000 colmenas

Clavero (unpublished data)

Apiary influence



*Junta de Andalucía: 11 210 localizaciones diferentes de colmenares y ~ 900.000 colmenas **solo en monte público.***

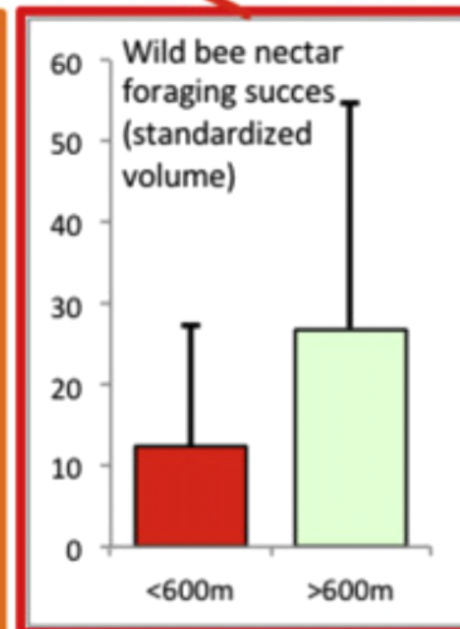
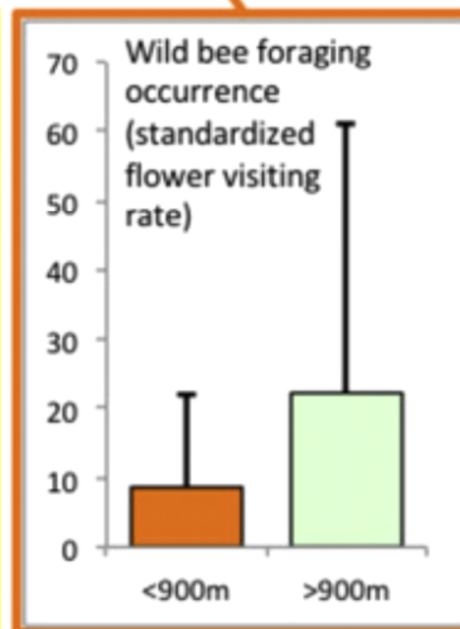
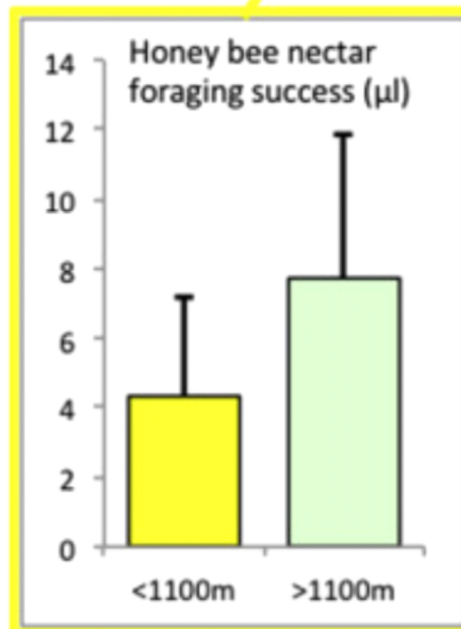
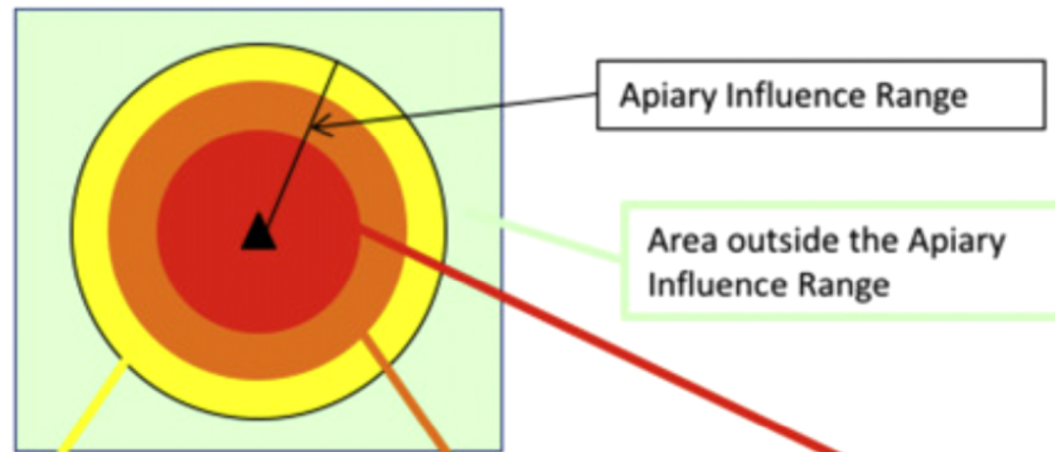


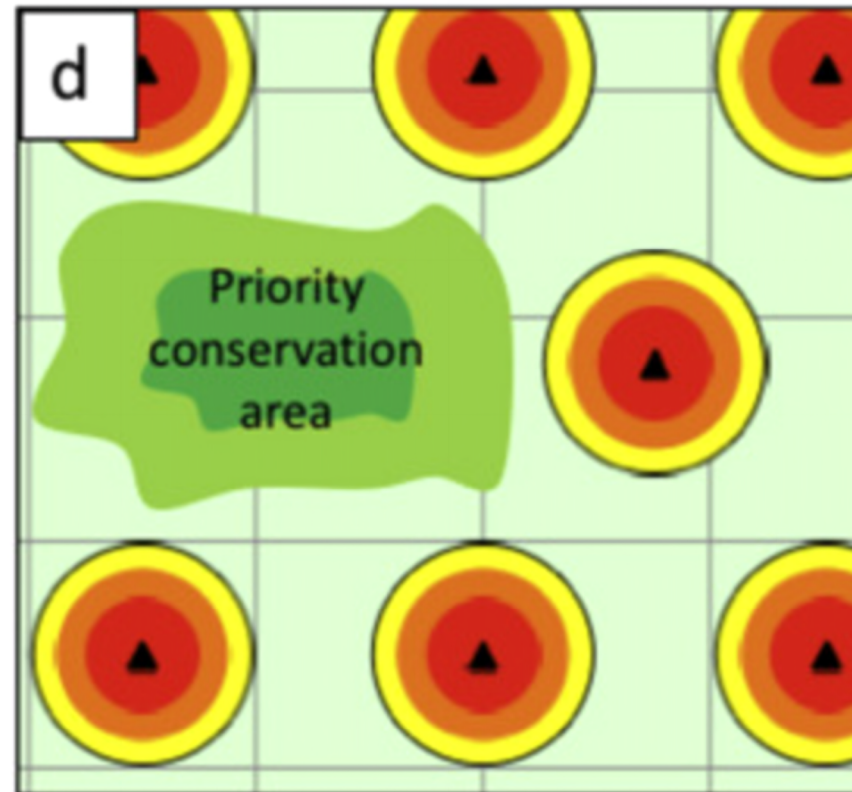
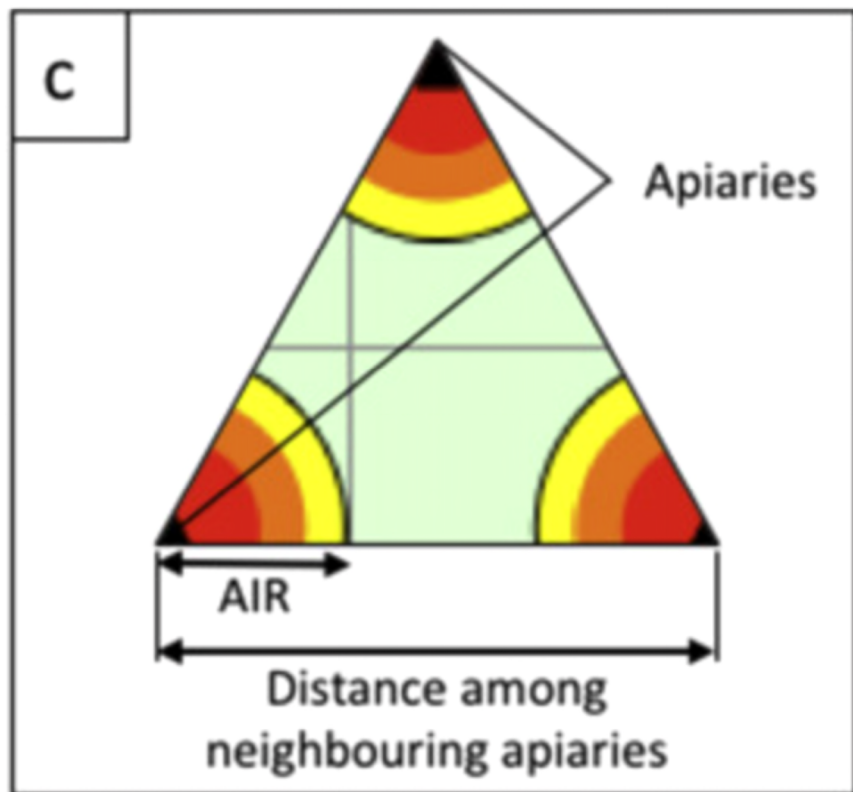
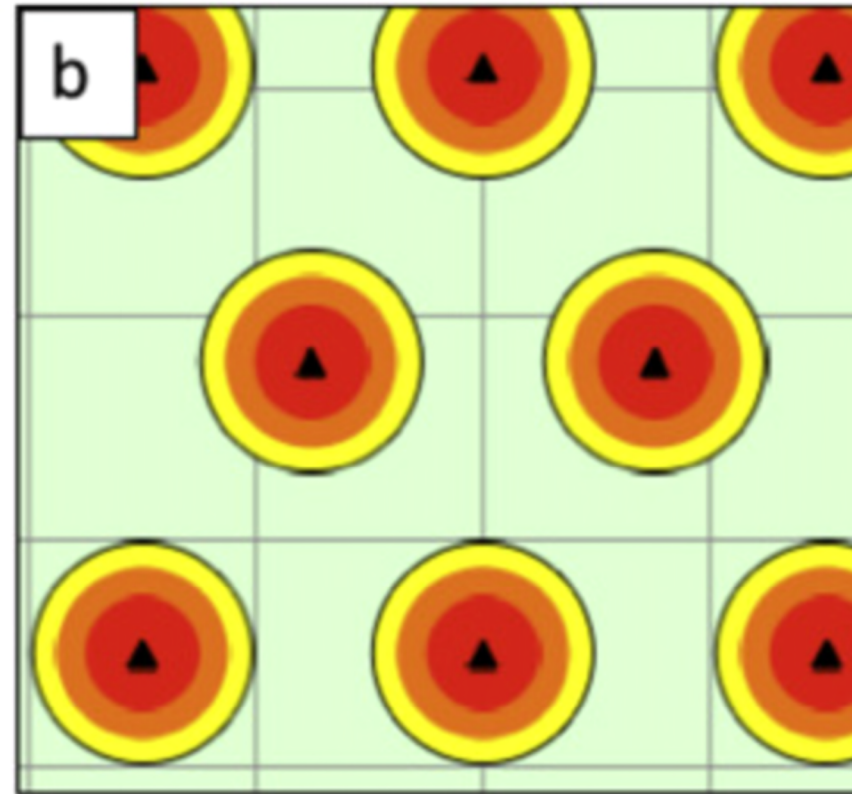
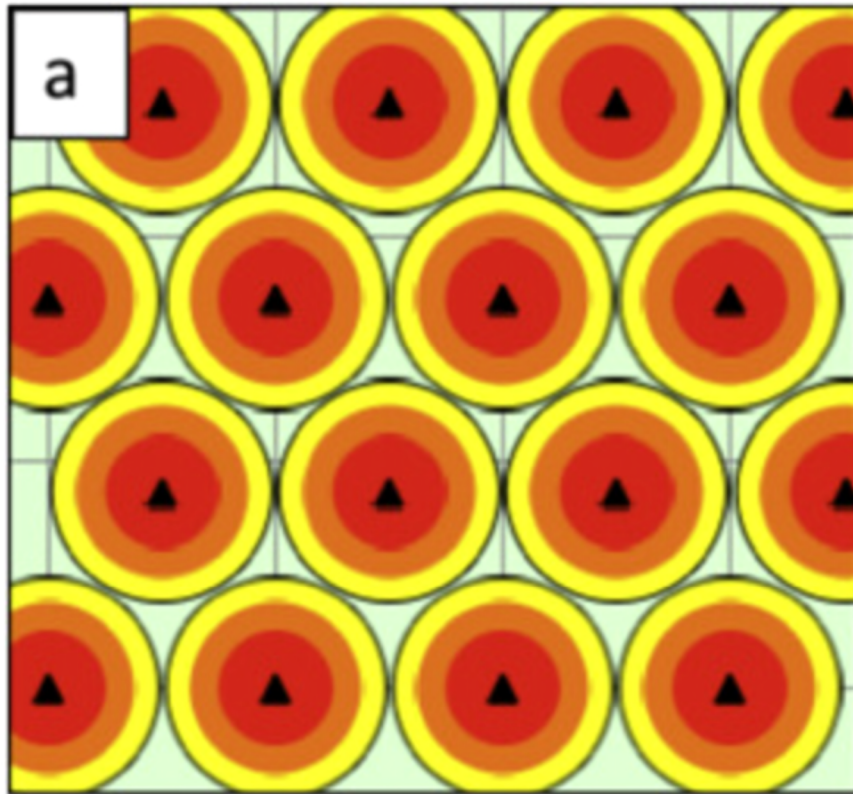
Competencia:

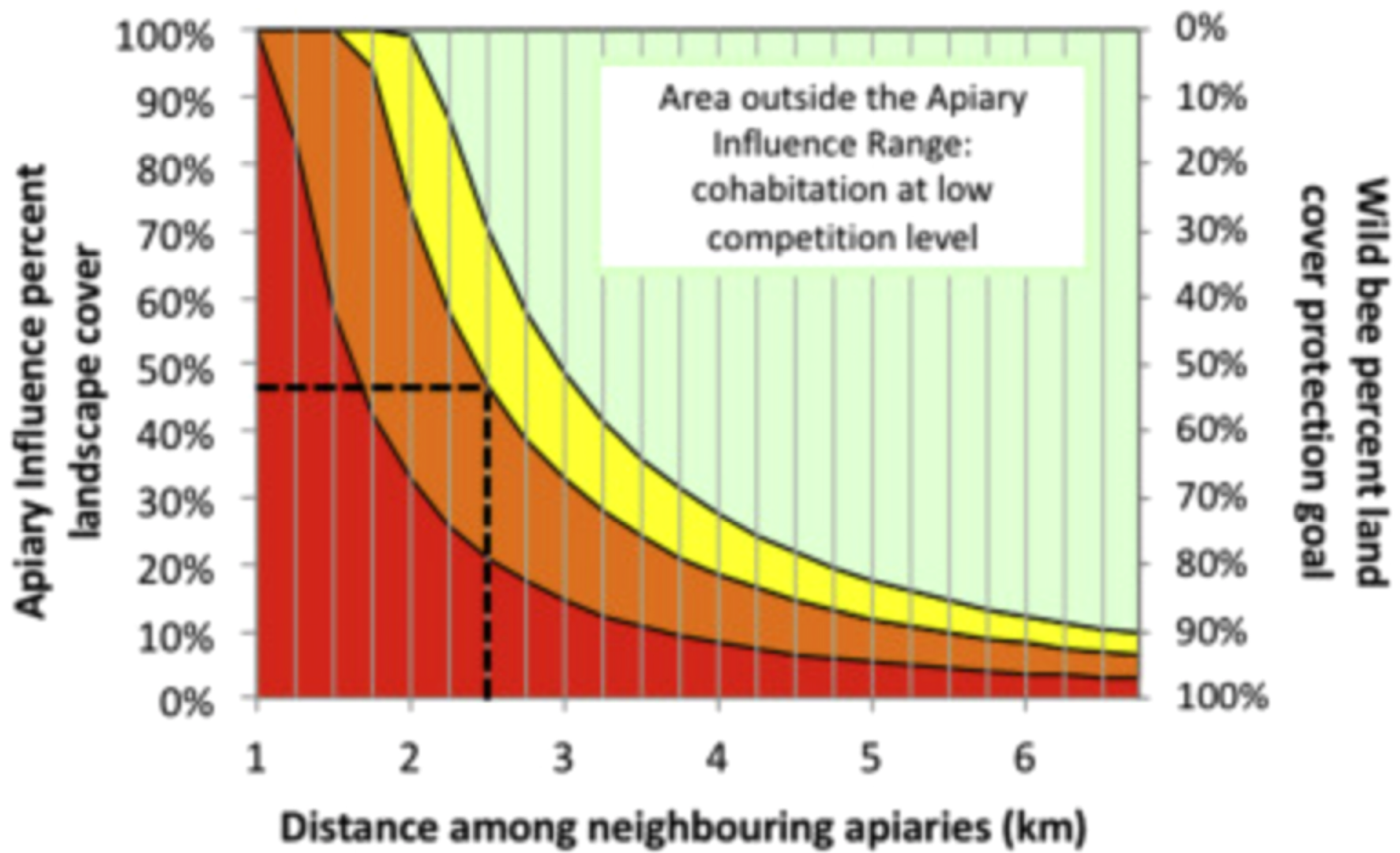
Cantidad y calidad de recursos

Especies silvestres

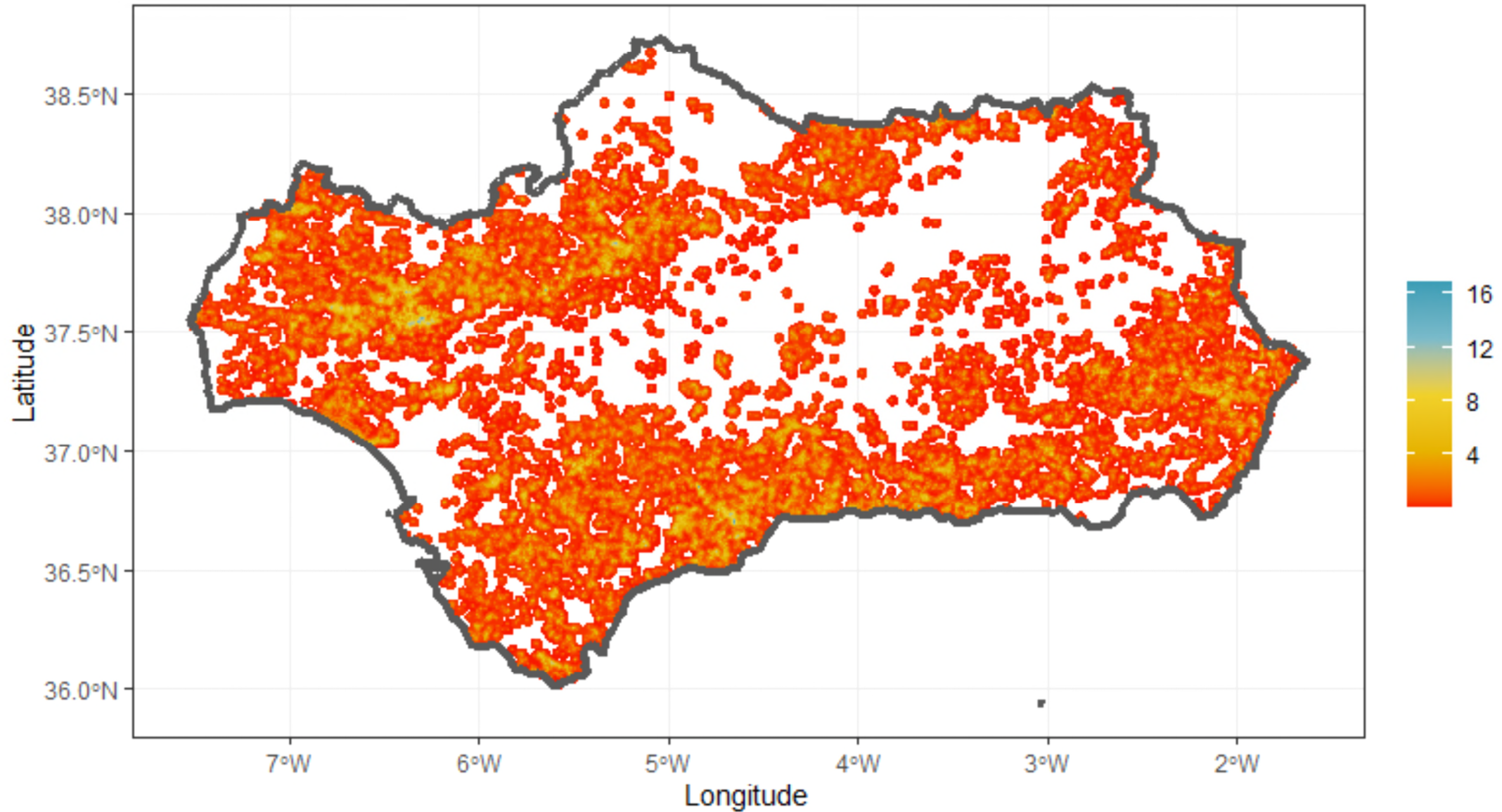
Variación temporal







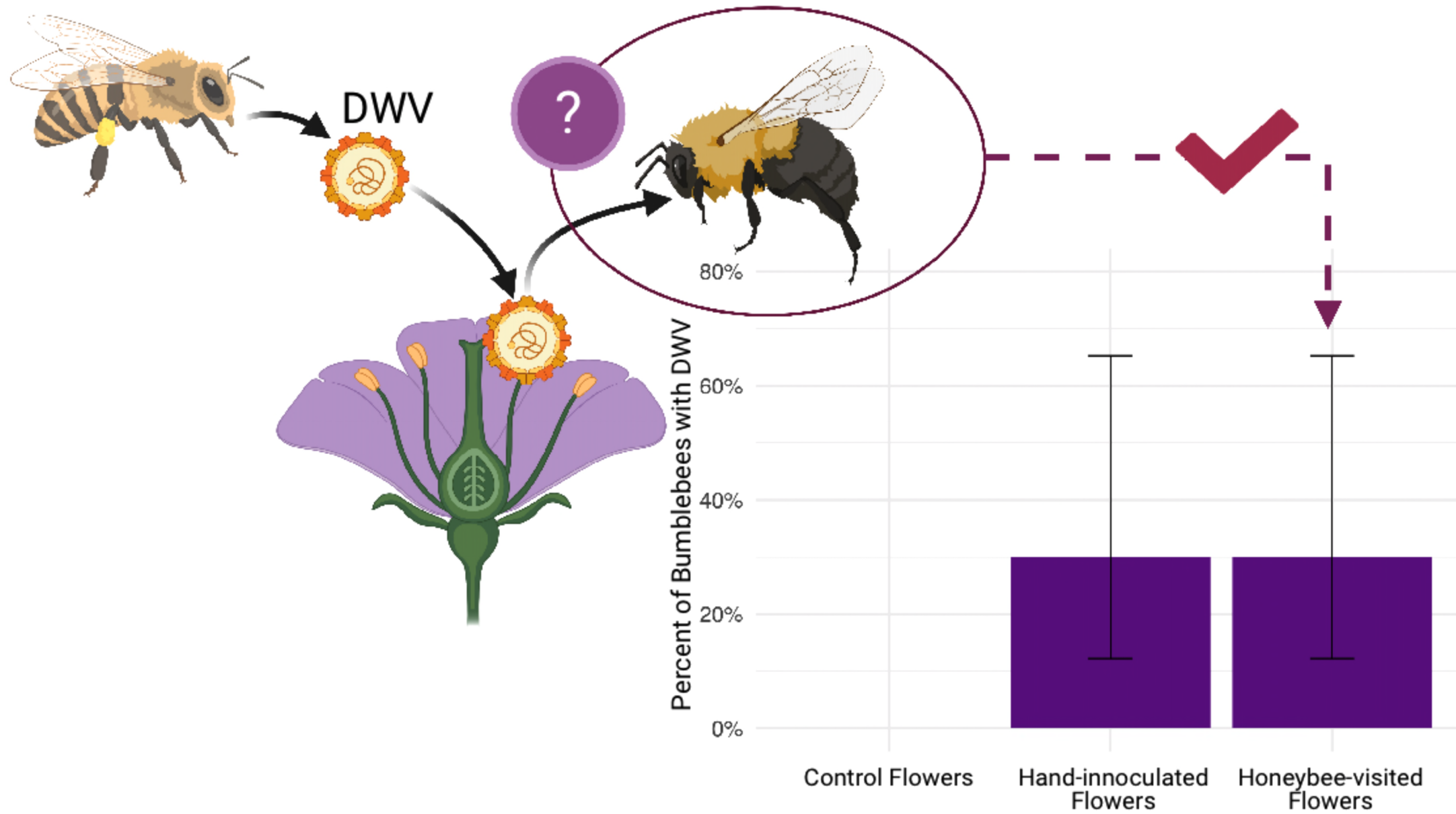
Apiary influence

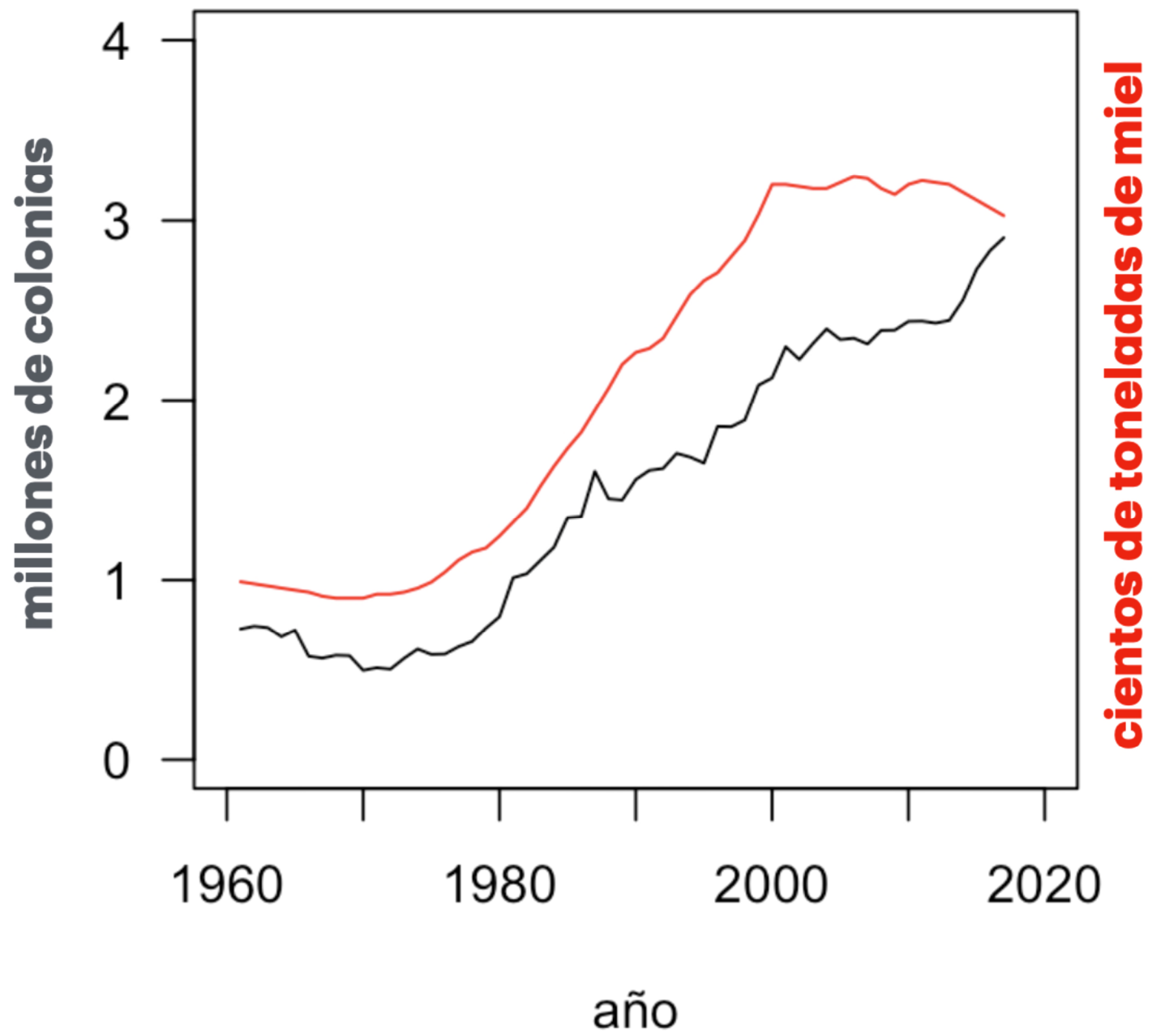


*Junta de Andalucía: 11 210 localizaciones diferentes de colmenares y ~ 900.000 colmenas **solo en monte público.***

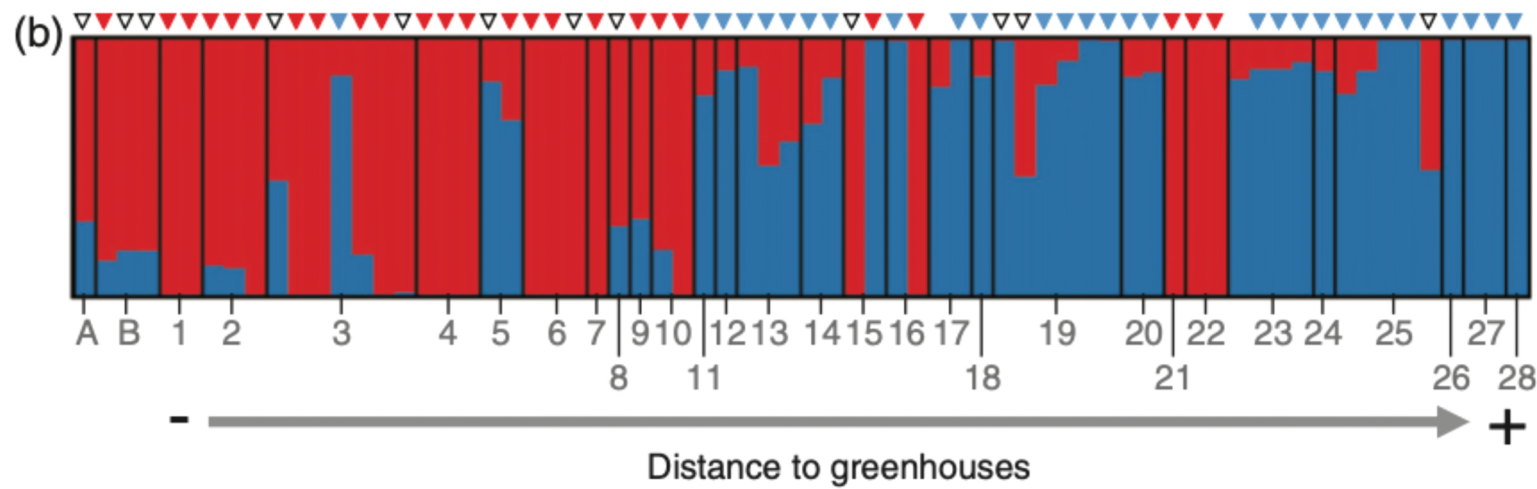
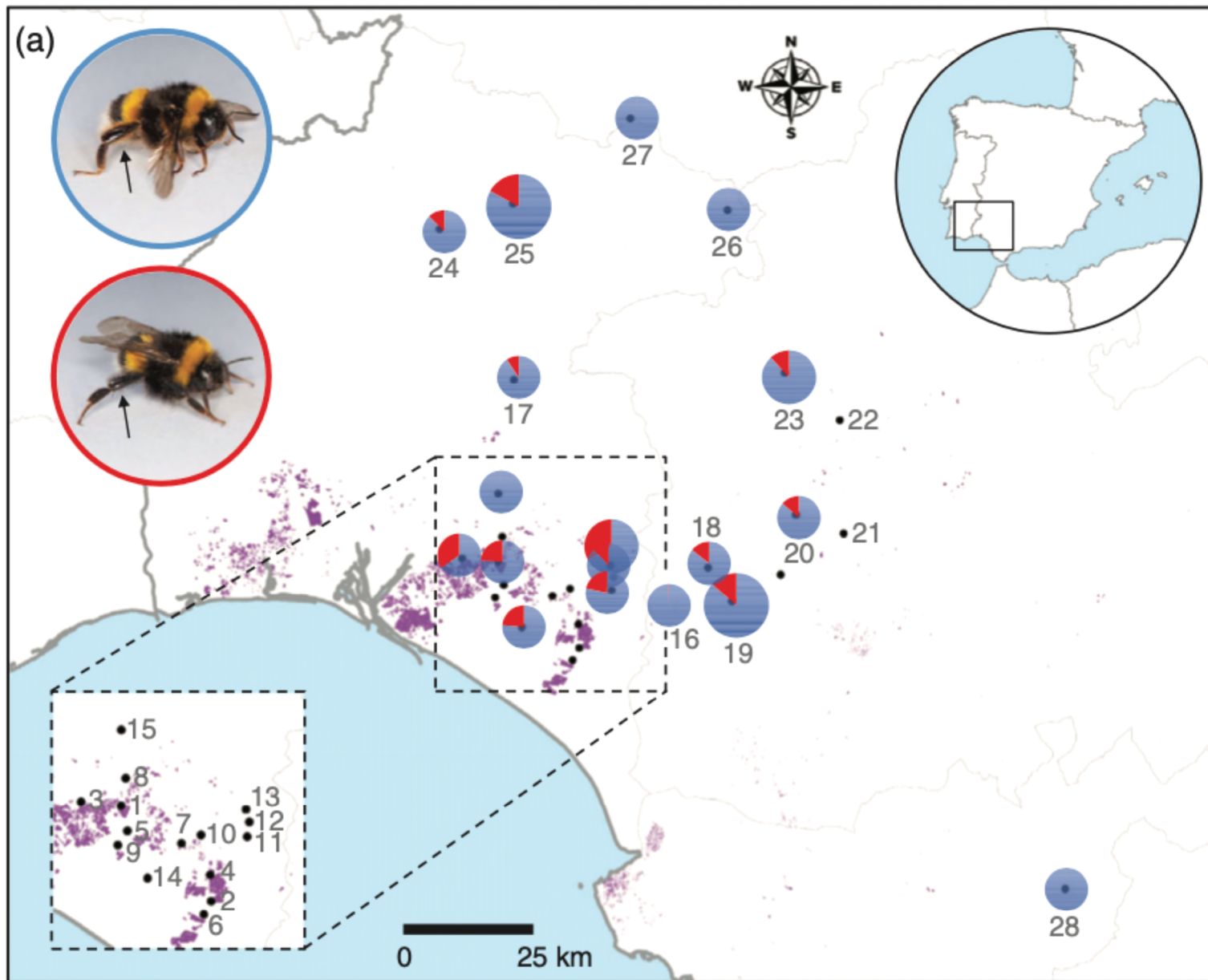
**Otras ventajas de la regulación
basada en distancias:**

Can honeybees transmit Deformed Wing Virus (DWV) to bumblebees through shared flowers?

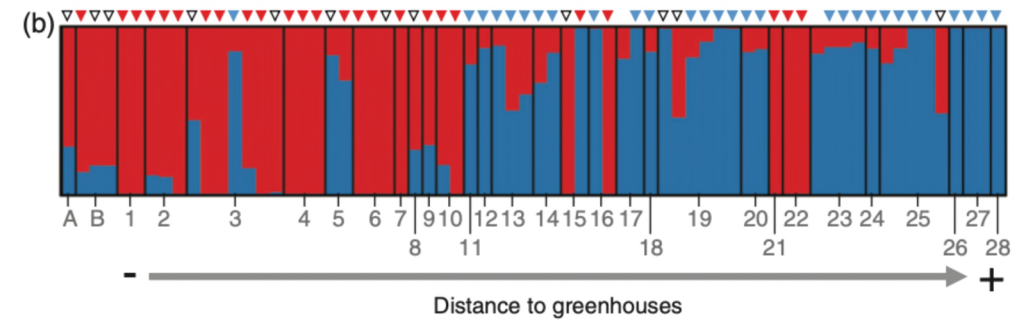
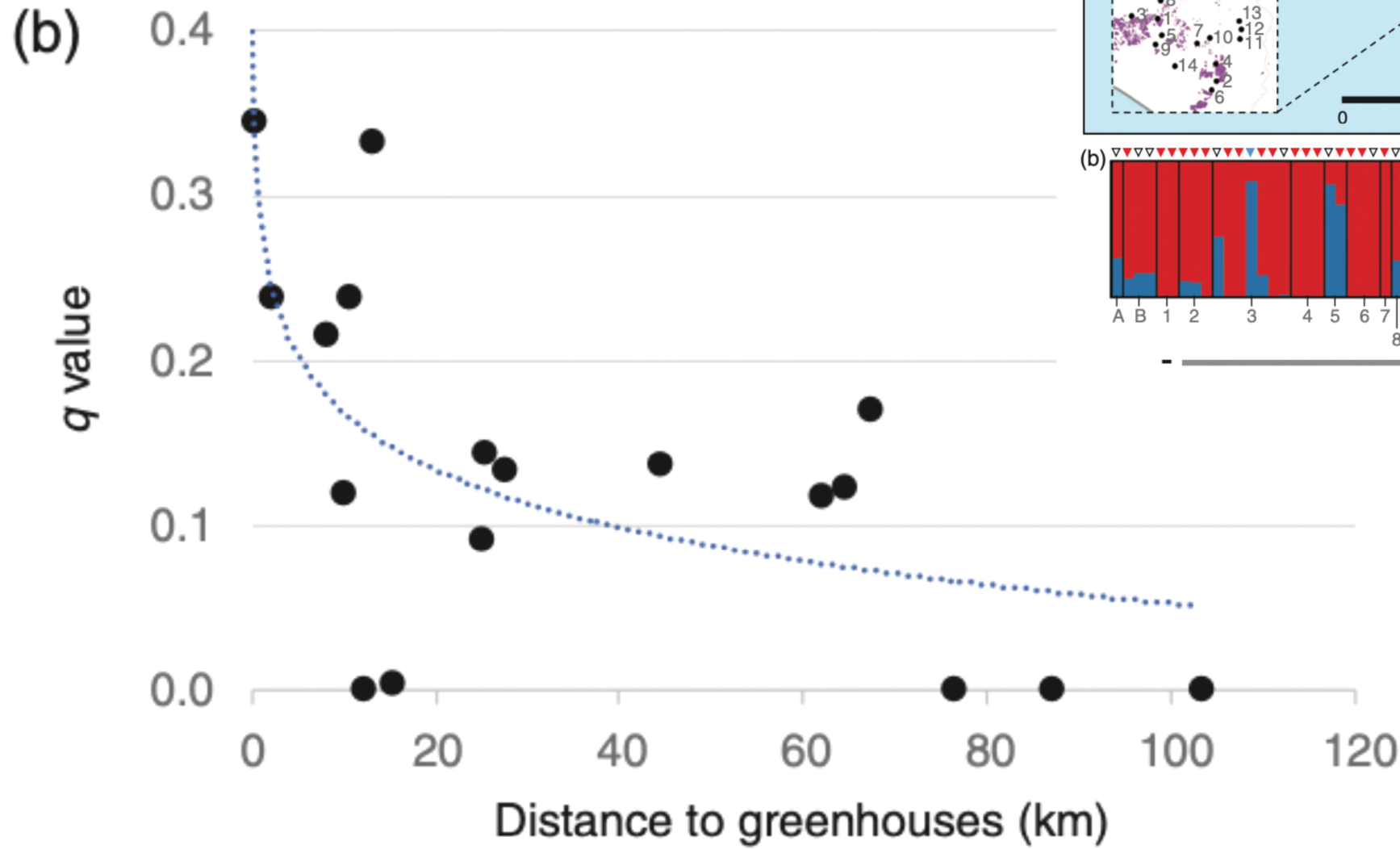
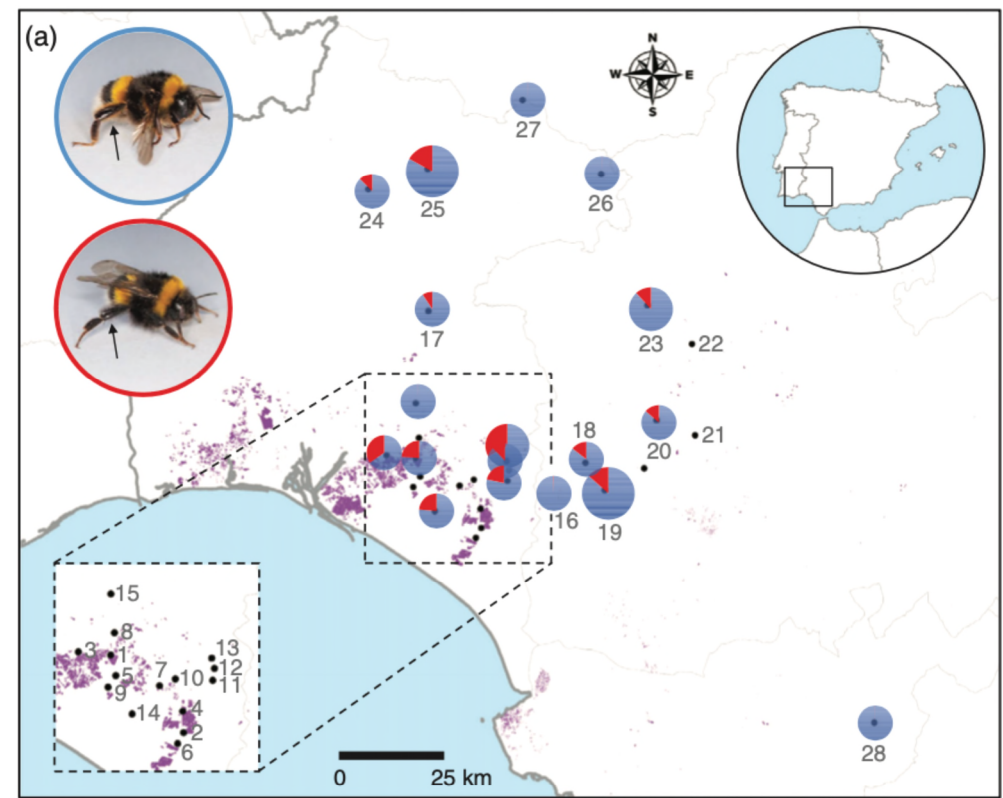




**La abeja de la miel no es
la única abeja manejada**



Bartomeus et al. 2020



Plantas y Polinizadores

Forman redes complejas que tienen un equilibrio

Factores como la sequía ya están afectando los recursos para los polinizadores

La competencia con la abeja de la miel es un factor importante

Regular con distancias es una medida eficiente con múltiples beneficios.



Gracias!

