INTERSPECIFIC WAR

Battle of a niche

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Galinsoga parviflora and Galinsoga quadriradiata live the same niche and it could be possible, that they also have to fight for this niche. Galinsoga parviflora has a starting advantage because it moved way earlier to Europe than Galinsoga quadriradiata, but what is the current situation? Has Galinsoga parviflora even now an advantage or is Galinsoga quadriradiata ready to take place?

- cosmopolitans
- Galinsoga is native in south america
  - G. parviflora: ~1800 in Europe
  - G. quadriradiata: ~1850 in Europe
- ruderal plants
- Ruderal vegetation:
  - vegetation in disturbed urban habitats
  - Neophytes: new species in a location since 1492

There were more places with plants of G. parviflora. This shows, that this specie still has higher advantages than G.quadriradiata for this niche.

Sample area: Braunschweig, Germany

G. quadriradiata has a clear advantage with the germination of its seeds, because they can germinate in a larger temperature spectrum and have a higher outcome of germination. Also the seeds can germinate better on a wide spectrum of solutions, which increases the variability.

Today Galinsoga parviflora has a supremacy for this niche, because it occurs a lot more in nature. But if you look at the experiments, there a clues that Galinsoga quadriradiata has a higher overall outcome of germination, and is espacially better adapted to lower temperatures. That's why there is a chance for G. quadriradiata to win the battle of this niche, but G. parviflora is equipped for the fight.