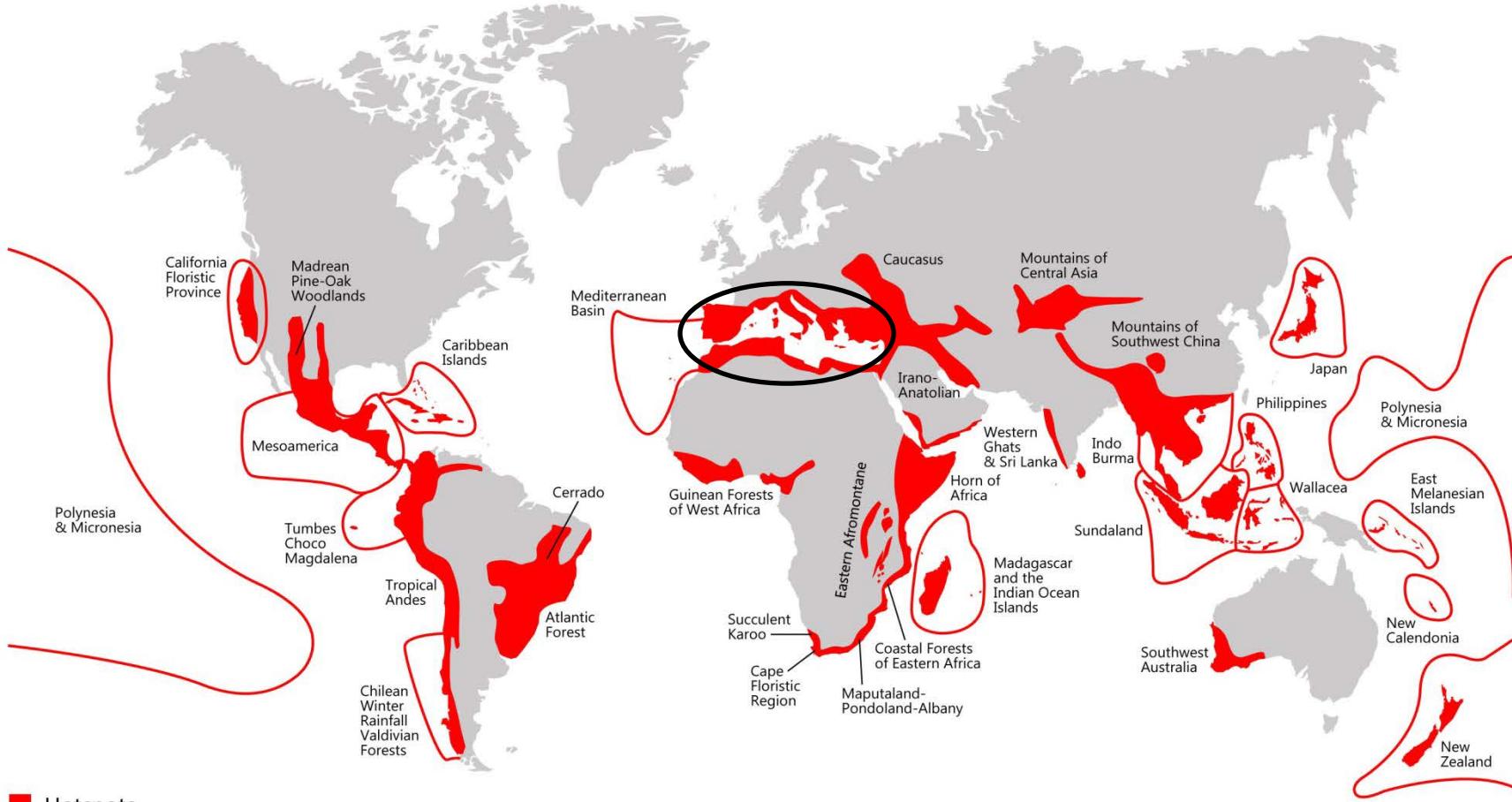


Prvi znanstveni simpozij o biologiji slatkih voda  
20. veljače 2015., Zagreb

# Određivanje vrućih točaka raznolikosti i endemizma nastalih pod utjecajem geološke i hidrološke prošlosti na primjeru porodice Empididae (Diptera)

Dr. sc. Marija Ivković



■ Hotspots

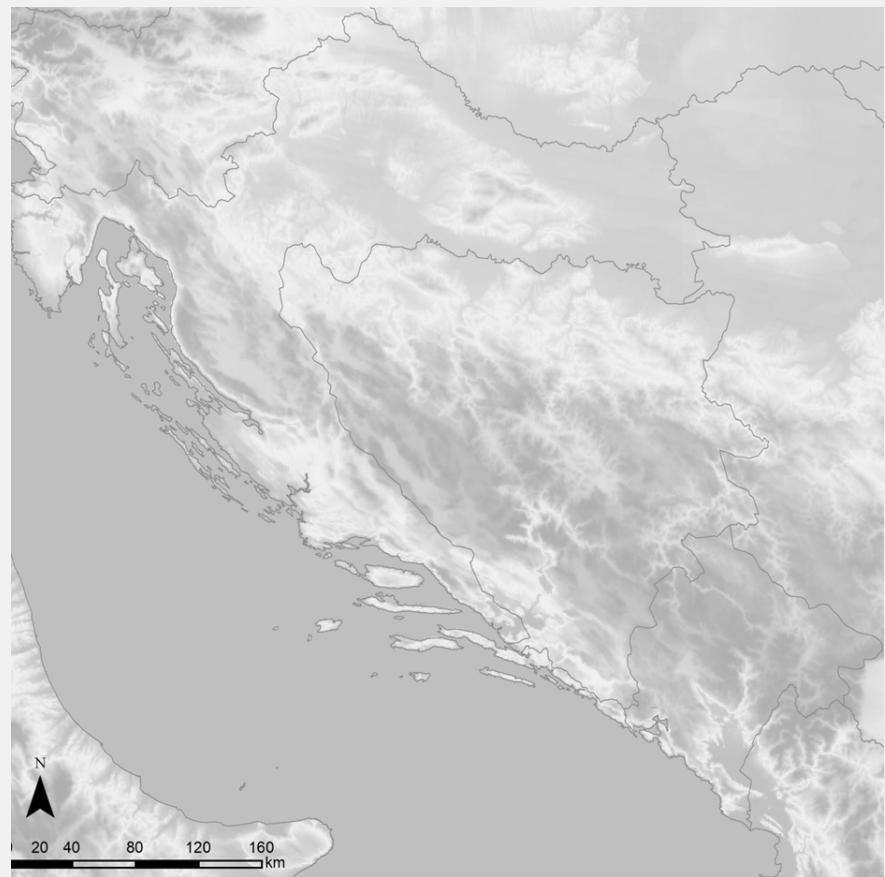
February 2005





- Zapadni Balkan (Dinaridi) veća genetska raznolikost (refugij unutar refugija)
- Najveći kontinuirani krški krajolik
- Komplicirana hidrološka mreža

- Raznolikost podzemne i slatkovodne faune
- Velika raznolikost slatkovodnih kukaca
- Važan glacijalni refugij



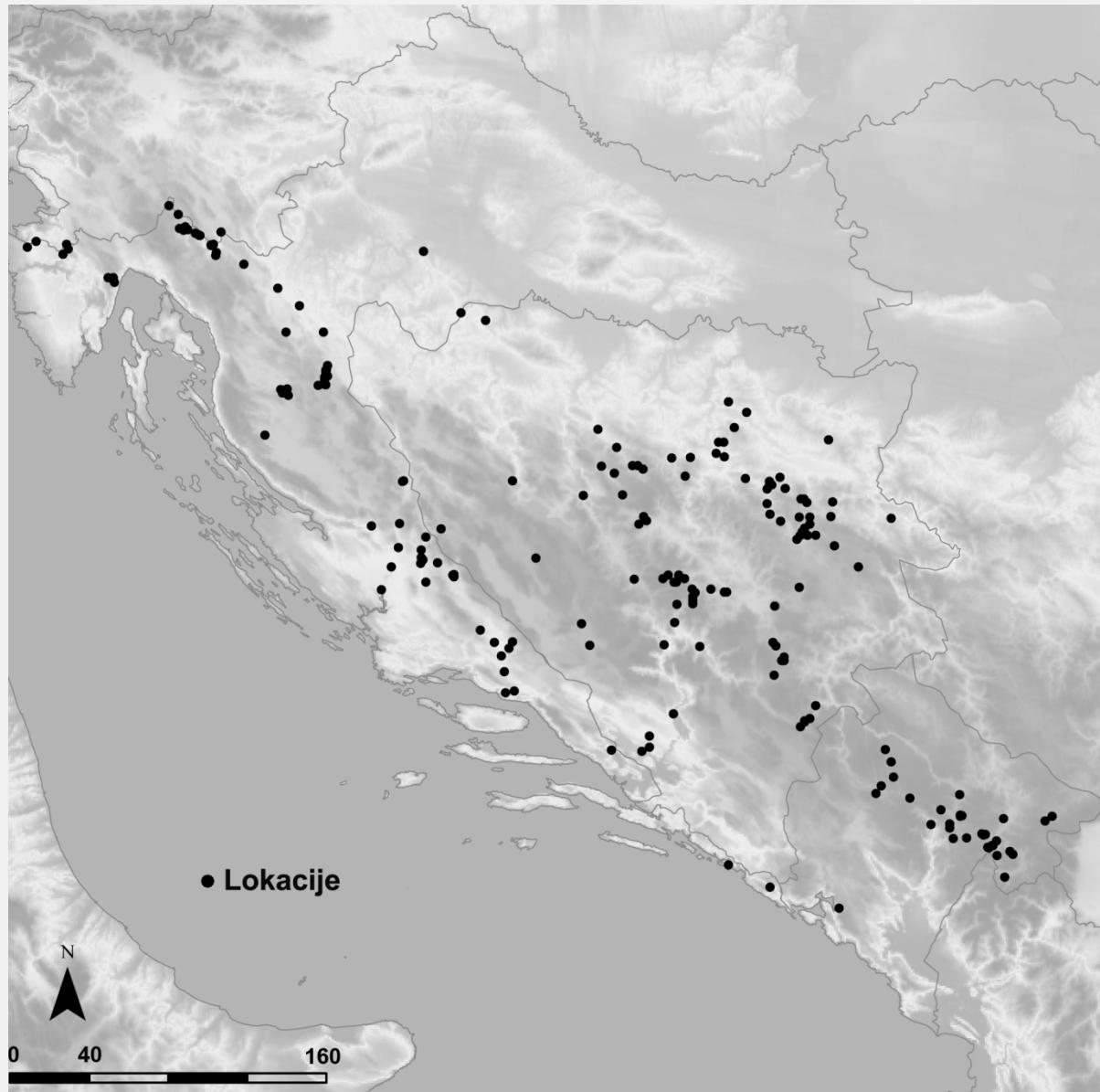


Empididae: Clinocerinae

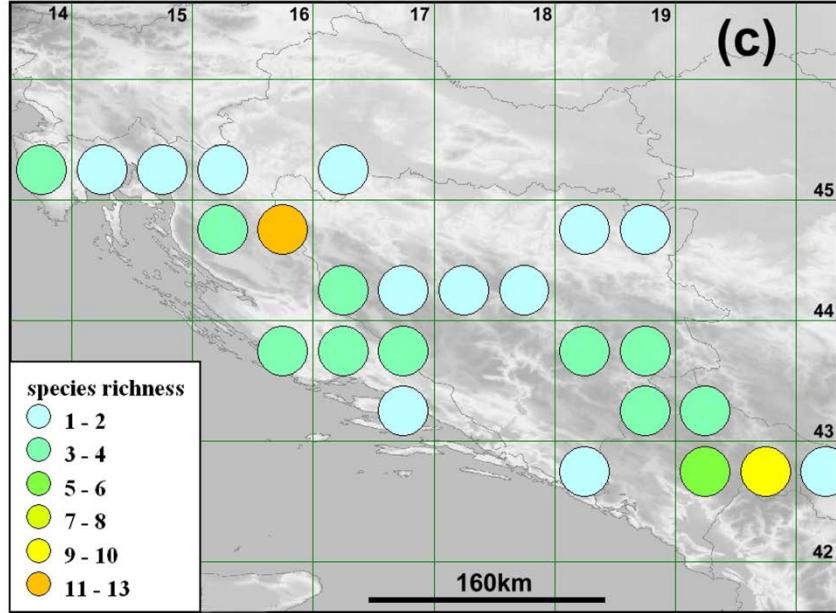
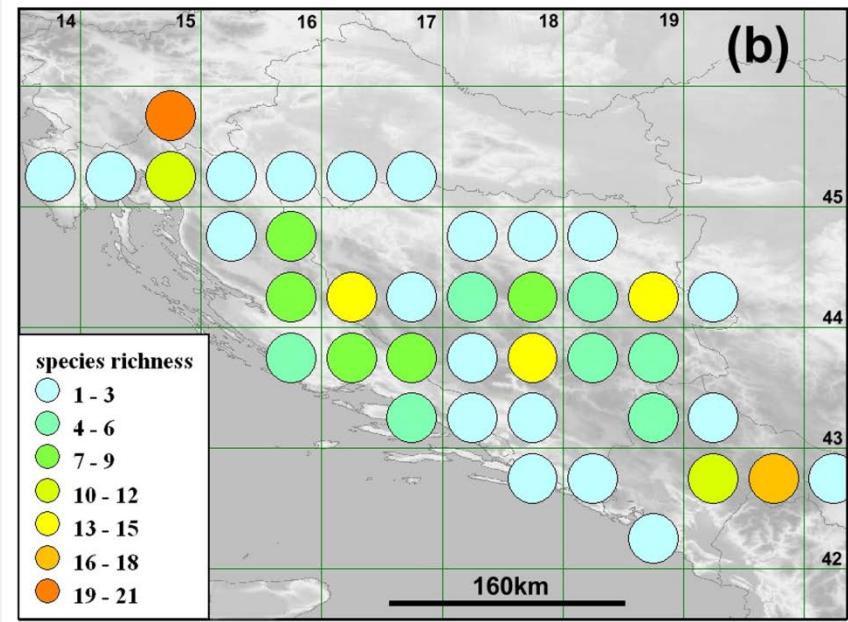
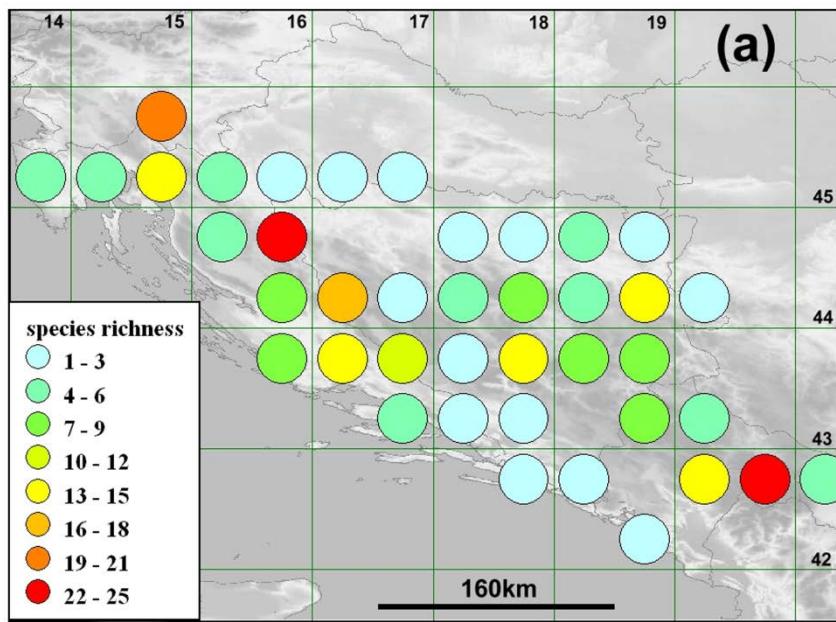


Empididae: Hemerodromiinae





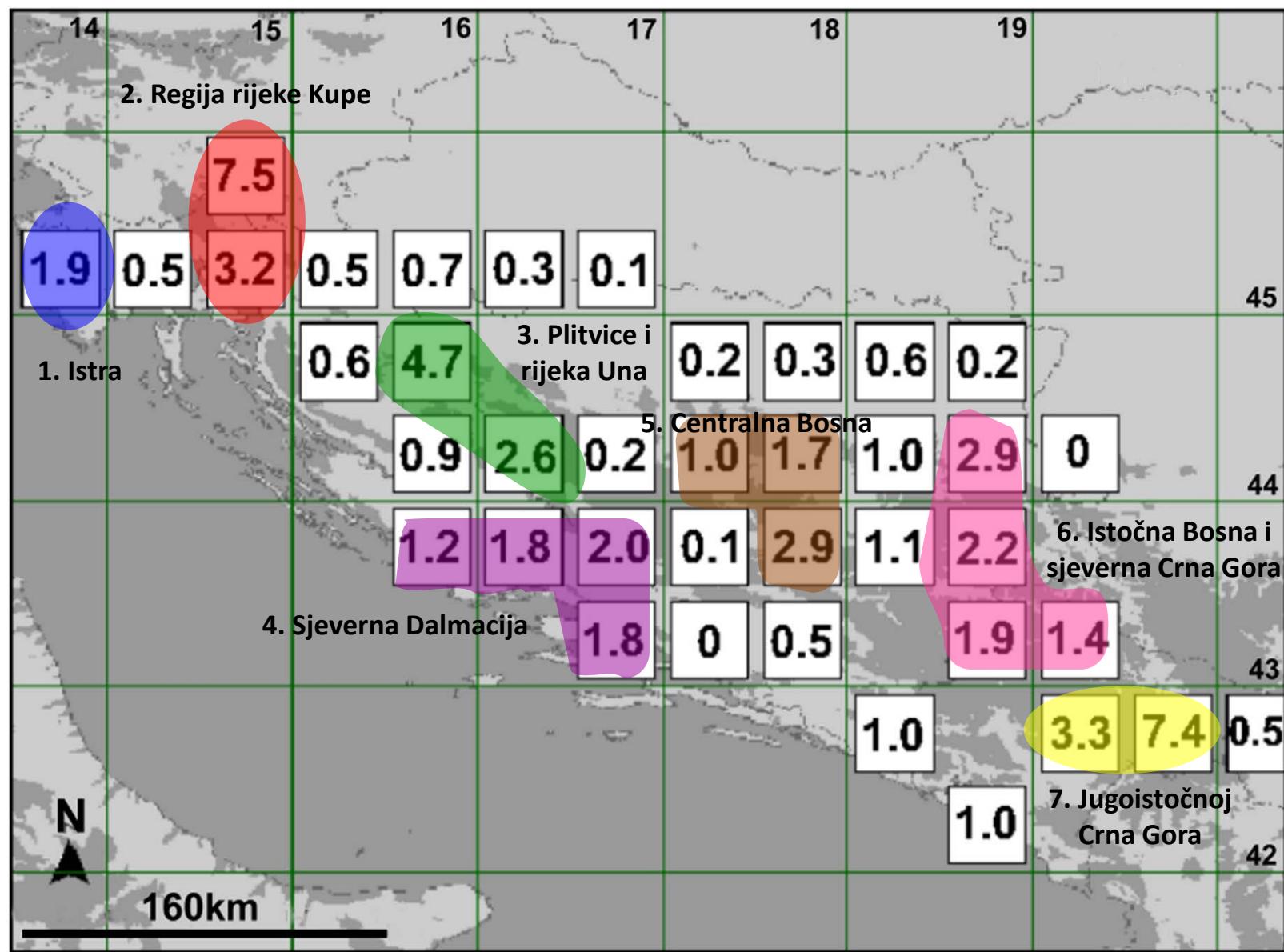
- Literaturni i neobjavljeni podaci
- Clinocerinae: 49 vrsta
- Hemerodromiinae: 15 vrsta
- 206 lokacija analiziranih na skali  $0,5^\circ$
- Izračunata je ponderirana recipročna vrijednost endemizma (reciprocal weighted endemism)
- Analiza endemizma metodom parsimonije (Parasimony analysis of endemism)



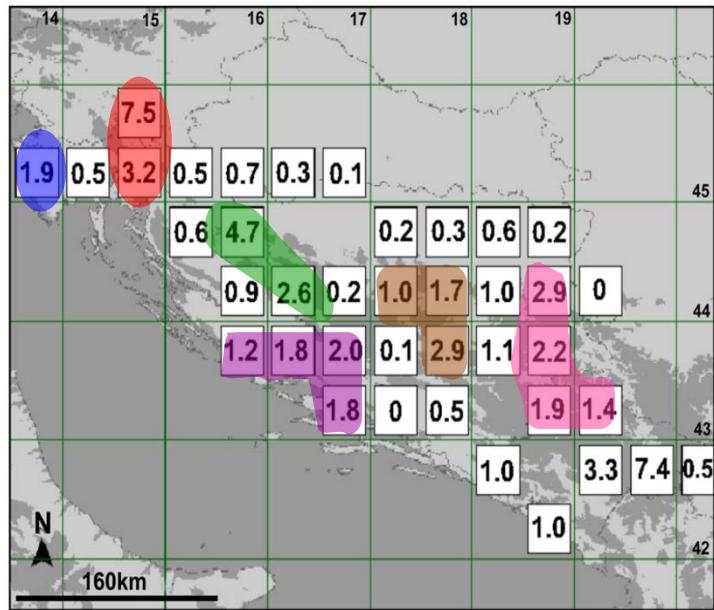
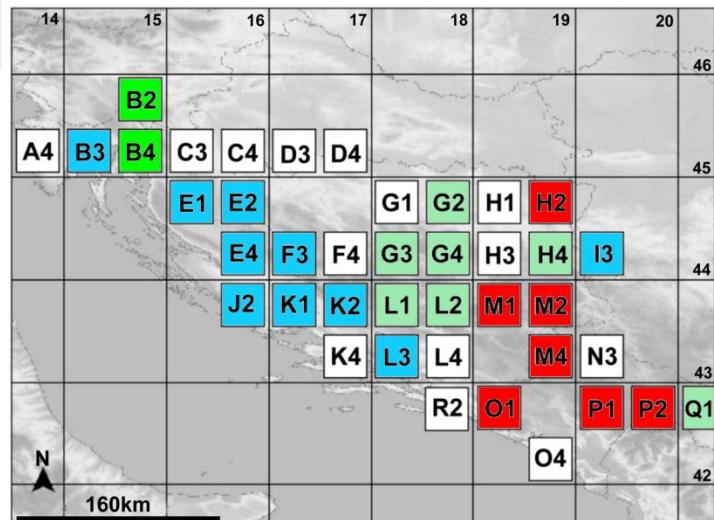
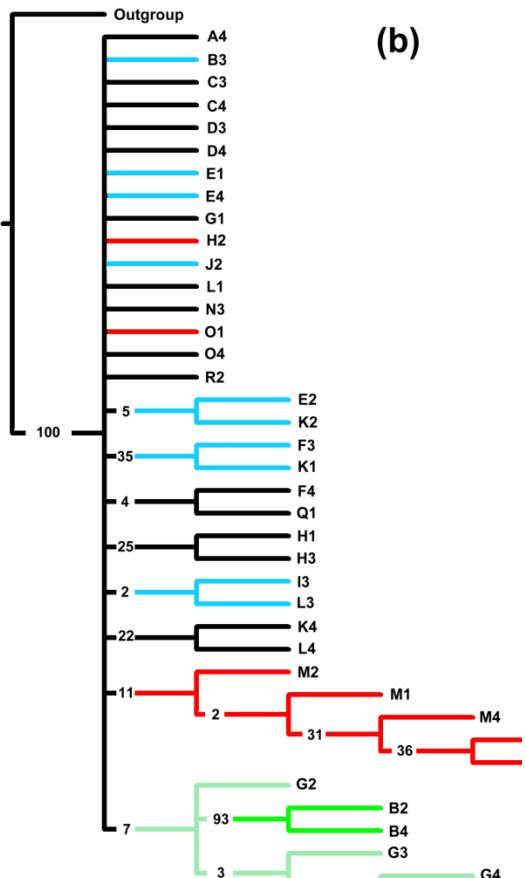
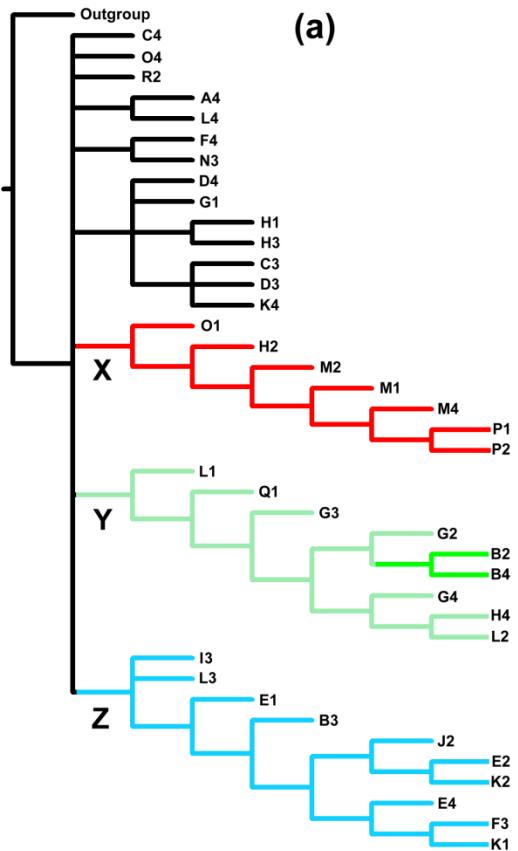
Bogatstvo vrsta:

- Clinocerinae i Hemerodrominae
- Clinocerinae
- Hemerodromiinae

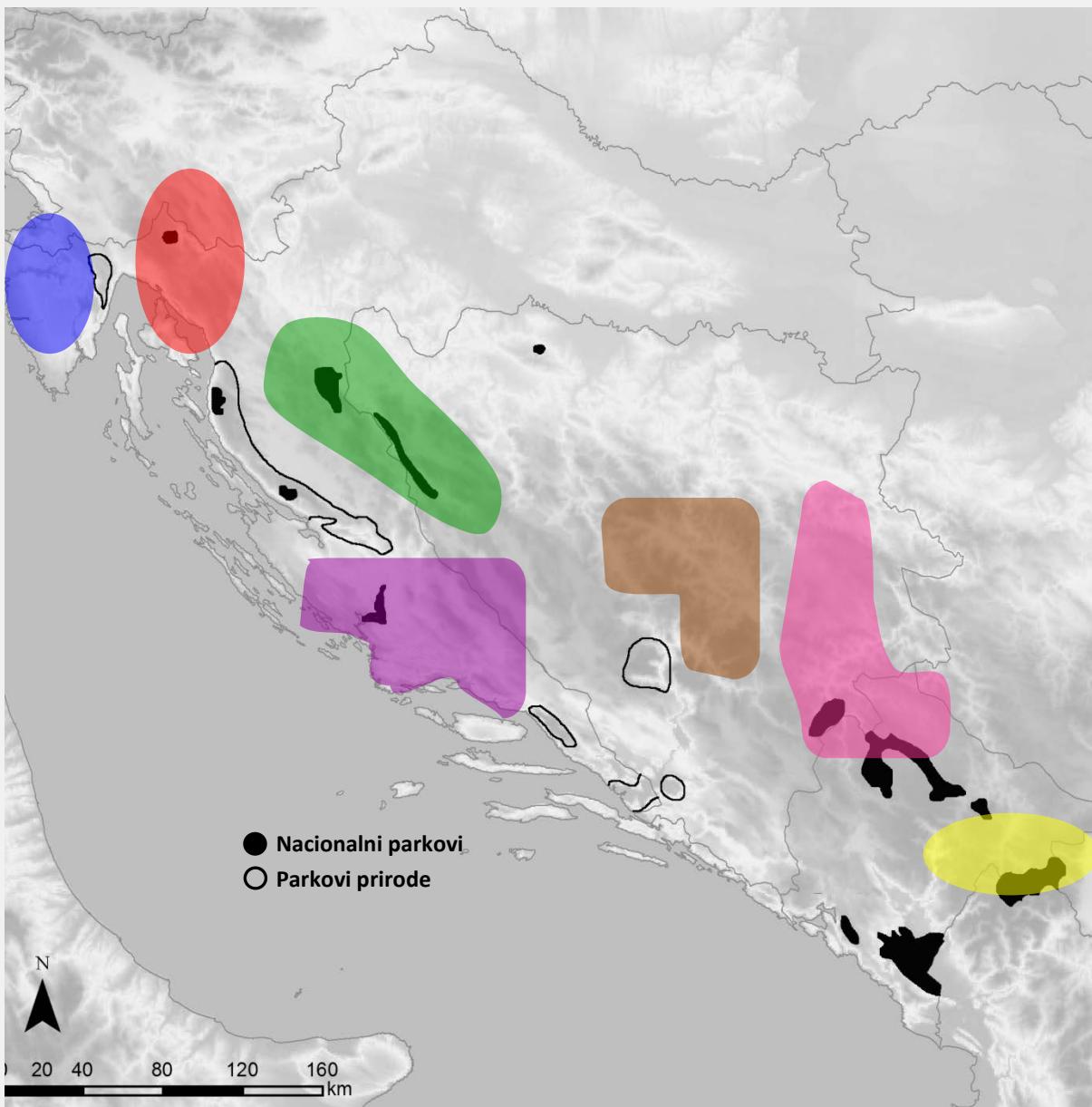
## Ponderirana recipročna vrijednost endemizma (reciprocal weighted endemism)



# Analiza endemizma metodom parsimonije (Parasimony analysis of endemism)



## Povišena endemičnosti vs. Zaštićena područja



**Hvala na pozornosti**



**Dr. sc. Adrian Plant**



**Dr. sc. Marija Ivković**