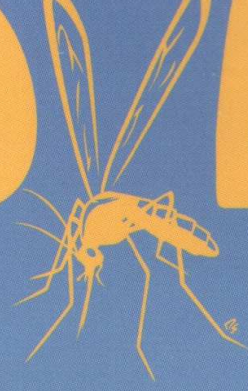


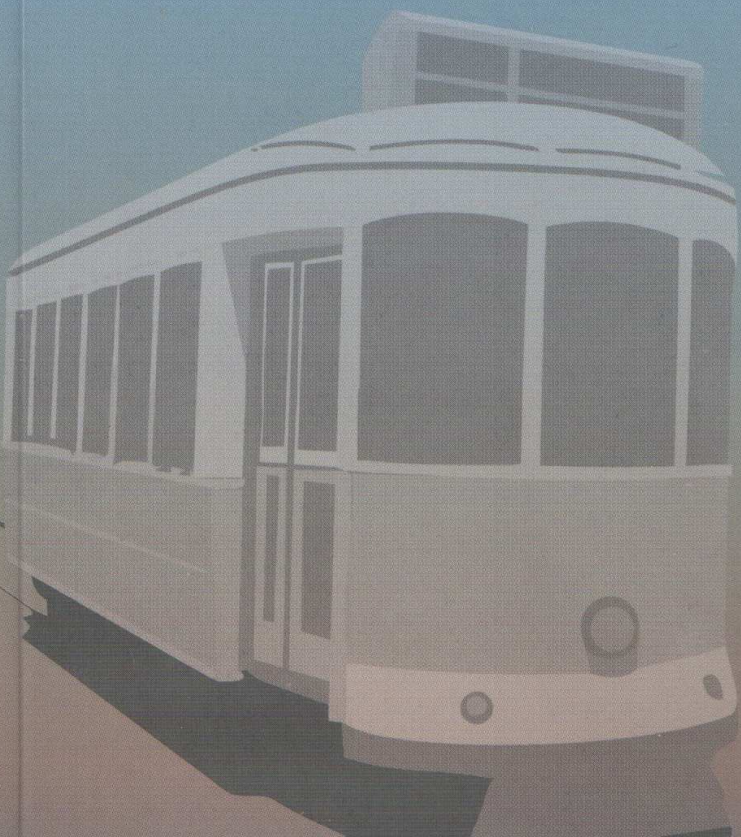
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When vectors collide with cultures:
'anthropo-vector ecology',
who is controlling who?



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EU-ECDC/EFSA VectorNet project: distribution of sand fly species (Diptera: Psychodidae), community analysis and pathogen detection in Balkans

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In the framework of EU-ECDC/EFSA VectorNet project, a total of eight countries (Bosnia and Herzegovina, Montenegro, Croatia, Bulgaria, Macedonia, Serbia, Kosovo, Slovenia), 267 locations and 36 cities were studied by sand fly team with the aim of determined altitudinal and trans-sectional distribution of species, identification of species and detection of possible pathogens in Balkan. Sand flies were collected with total of 951 traps/night during the field missions. From this study, 12 species (*P. neglectus*, *P. tobbi*, *P. perfiliewi s.l.*, *P. papatasi*, *P. perniciosus*, *P. simici*, *P. alexandri*, *P. sergenti*, *P. balcanicus*, *P. mascitti*, *P. jacusieli*, *S. minuta*) were identified from a total of 9,096 specimens. The results shows that *Phlebotomus neglectus* (74%) major dominant species in Balkan countries and the species were collected from all countries with also *Phlebotomus tobbi* (10%). These two species comprise 84% of total abundance. Other species are: *P. perfiliewi s.l.* (6.13%), *S. minuta* (3.56%), *P. perniciosus* (1.57%), *P. papatasi* (1.35%), *P. simici* (0.9%), *P. mascitti* (0.45%), *P. sergenti* (0.1%), *P. alexandri* (0.07%), *P. balcanicus* (0.03%) (found only in Montenegro). We determined altitudinal preferences of the species between 100-400 m with the optimum altitude of 200-300 m. We also calculated some of the important community parameters such as similarity, richness, species diversity, species evenness and dominance for the countries. In pathogen detection studies, 2 (two) novel viruses in Bosnia and Herzegovina, and Macedonia, and *L. infantum* parasites in Bosnia and Herzegovina, Macedonia and Kosovo were determined.