

NEW BEETLE SPECIES FOUND ON OLD OAKS IN SOUTHERN TURKEY

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Introduction

Old oaks (*Quercus* sp) and its beetle fauna are very rare and threatened all over Europe and Turkey. The reason is lack of suitable trees from unfavourable management or habitat conversion. The aim with the study is to describe the diversity and compare the similarity of this fauna in different areas with old oaks in Turkey and compare with studies in similar habitats in UK, France and Sweden. But also study the species richness on oaks that regularly get their branches cut from old traditions (pollards/coppice).



A = Gölhisar (2009)
B = Kasnak (2007)
C = Gülnar (2006)
D = Erdemli (2005)

Methods: In this project the same methods have been used for sampling the beetles: window traps on the tree trunk and pit fall traps in the trunk cavities. In Turkey eight stands with old hollow oaks, spread on four areas, have been studied and in UK 2 sites, France 3 sites and Sweden 4 sites. The saproxylic beetles were caught on 10 trees per stand in one season. In this preliminary presentation only 12 saproxylic beetle families are included.



A. Pollarded oaks in Gülnar. B. Work with traps in Erdemli region. C. Window-trap in Kasnak oak forest. D. Large diameter oak in Gölhisar

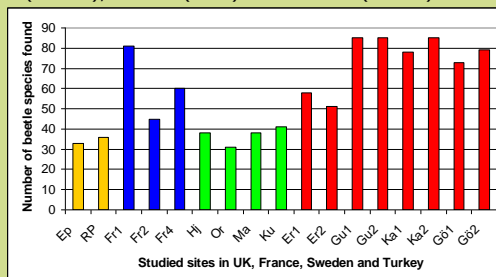
Result 1:

Many of the beetle species were found for the first time in the country and so far 25 species are identified as new to science. From the beetle family Elateridae (click beetles) we have found 14 species.



21 of the new species: 1. *Agriotes* n sp1, 2. *Agriotes* n sp 2, 3. *Ariotes* n sp3, 4. *Ampedus* n sp, 5. *Brachygonus* n sp, 6. *Cardiophorus* n sp1, 7. *Cardiophorus* n sp2, 8. *Dicronyhus* n sp, 9. *Elater* n sp, 10. *Elathous* n sp 1, 11. *Elathous* n sp 2, 12. *Megathous* nsp, 13. *Peripontius* n sp, 14. *Tolporea* n sp, 15. *Hesperus auricomus*, 16. *Hesperus gozukurai*, 17. *Hesperus turcicus*, 18. *Allecula* n sp1, 19. *Allecula* n sp2, 20. *Mycetochara* n sp1, 21. *Mycetochara* n sp2.

Result 2: The number of beetles caught with window traps on old oaks were often higher at the Turkish sites in comparison with UK (Yellow), France (Blue) and Sweden (Green).



Conclusion: The result shows the unique species richness of Turkish oaks and the high endemism among the beetle fauna in Turkey. The conservation value of these habitats are higher than most of similar areas in Europe.

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