

DIET OF THE WOODMOUSE, *APODEMUS SYLVATICUS*,  
IN THREE HABITATS OF KABYLIE OF DJURDJURA (NE ALGERIA)

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The diet of the wood mouse, *Apodemus sylvaticus*, was investigated over an annual cycle in three habitats of Kabylie of Djurdjura, differing by the structure of the vegetation and anthropic action. The analysis of 140 stomach contents was restricted to the three main components: seeds, vegetative items and animal remains, expressed in dry weight (g) and percentages of occurrence (%). Five independent variables were considered: habitat (forest, maquis and cultivated zone), sex, sexual activity, season and age (juvenile, sub-adult and adult).

In the three habitats Woodmouse was primarily granivorous. Seeds (mainly acorn *Quercus suber*, myrtle *Myrtus communis*, and fig *Ficus carica*) occurred in 99.3 % of the stomachs, for 91.5% dry weight of the whole content. Differences among seasons and for sexual activity were highly significant ( $F=7.55$ ,  $P=0.001$ ;  $F=5.69$ ,  $P=0.018$  respectively). Females were reported to eat more seeds than males (Anova,  $F=3.42$ ,  $P=0.067$ ).

Vegetative items and arthropods were also part of the diet but in relatively small proportions compared to seeds. The consumption of vegetative items (leaves, stems and flowers, e.g. flowers of *Calycotoma spinosa*) was overall rather frequent (frequency of occurrence,  $F_o=19.3\%$ ) for a dry weight of only 4.0 %. Logistic regression provided significant results for season and station ( $Z=-2.86$ ,  $P=0.004$ ;  $Z=2.14$ ,  $P=0.032$  respectively). The vegetative items were mainly eaten in the cultivated zone, they were more frequent in winter and spring than in summer.

Arthropods, mainly insects, were frequently preyed ( $F_o=26.4\%$ ) for a dry weight of only 4,4%. Their consumption varied significantly with habitat and age (logistic regression,  $Z=-4.31$ ,  $P<0.001$ ;  $Z=1.95$ ,  $P=0.051$  respectively). The highest occurrence (61.3%) was recorded in forest, and the weakest (0%) in the cultivated zone.

The Woodmouse diet in the Mediterranean habitats is discussed by comparison with literature data in the same biome and in the northern part of the range.