

UNIVERSIDADE TÉCNICA DE LISBOA  
INSTITUTO SUPERIOR DE AGRONOMIA

**Intercepção da precipitação e transpiração em  
árvores isoladas de *Quercus rotundifolia* Lam.**

**DOUTORAMENTO EM ENGENHARIA FLORESTAL**

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## RESUMO

A intercepção da precipitação e a transpiração foram medidas, durante cerca de dois anos, em árvores isoladas de *Quercus rotundifolia* Lam. num montado de baixa densidade da região de Évora.

A perda por intercepção foi de 21.7 % da precipitação bruta, por área de projecção da copa. A redistribuição da precipitação sob a copa traduziu-se em aumentos nos quadrantes virados a Sul e Oeste (ventos dominantes) e depleções nos quadrantes Norte e Este. A acumulação da precipitação em certas zonas sob a copa, é certamente determinante para a interpretação da heterogeneidade da vegetação herbáceo-arbustiva em montados.

A evolução sazonal da transpiração foi fundamentalmente determinada pela radiação solar e défice de pressão de vapor, não se verificando variações consideráveis nas disponibilidades hídricas ao nível das raízes devido, possivelmente, ao seu acesso a um aquífero a 13 m de profundidade. O controle estomático evita que a transpiração exceda a capacidade limite de bombagem de água a partir do solo/subsolo, condicionando a existência de uma plataforma máxima para a transpiração e impedindo que o potencial foliar desça abaixo de -3.2 MPa, provável limiar de cavitação do xilema. A grande expansão do sistema radicular parece constituir um dos principais processos adaptativos da espécie às condições edafo-climáticas adversas.

**Palavras-chave:** *Quercus rotundifolia* Lam., intercepção da precipitação, transpiração, fluxo de seiva, montado, *dehesa*.

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