

Ecological Adaptations of Mediterranean Shrub Species

Mediterranean shrub species exhibit a variety of functional traits that enable them to survive in arid and fire-prone environments. *Quercus coccifera* (kermes oak) is known for its sclerophyllous leaves, which reduce water loss, and its ability to resprout after fire, a trait known as post-fire regeneration. Another species, *Rosmarinus officinalis* (rosemary), is characterized by its aromatic leaves, which contain essential oils that deter herbivores, and its deep root system, which allows it to access water during dry periods. *Cistus salviifolius* (sage-leaved rockrose) is notable for its high seed production and rapid germination after fire, ensuring its survival in frequently disturbed habitats. These functional traits highlight the ecological adaptations of Mediterranean shrubs and their importance in maintaining ecosystem resilience.