

5. Subtropical zone – Mediterranean climate

Distribution

30° of latitude both in Northern and Southern hemisphere. USA (California), Mediterranean Sea (Portugal, Spain, Cote d'Azur, Italy, Dalmatia, Monte Negro, Albania, Greece, Turkey, Syria, Israel, Lybia, Tunisia, Algeria, Morocco and islands – Corsica, Sardinia, Sicily, Greek islands), Northern Chile, SW of RSA, SW and SE of Australia (e.g. Victoria) + Tasmania).

Climate

2 seasons: *long, dry, hot, sunny summer and mild, mostly wet winter* (rainfall)

- *Temperature*: summer >26°C, 7°C in winter
- *Precipitation*: 600 mm (drought is common during summer, winter rainfall)
- *Humidity*: 30% in summer, 80% in winter

Soils

Rendzinas found on limestone or calcareous marl, black/brown upper horizon = rich in organic matter (calcium).

Intrazonal soils = developed on a particular rock type rather than due to climatic conditions.

Terra Rosa (red rendzinas) found on limestone, formed by weathering of limestone, CaCO₃ (calcium carbonate) is weathered by carbonation.

Hydrology

- *Rivers*: America = Sacramento r., Mediterranean Sea = Tejo r., Ebro r., Po r., Rhône r., Nile r.

Fauna and Flora

Vegetation in Mediterranean climate is adapted to drought = *drought-resistant or xerophytic plants* = thick leathery leaves, waxy cuticles, needle-like leaves (reducing evaporation)

- *Fauna*: lizards, sea-gulls, squirrel, vole (field mouse), chameleon, echidna, mouflon
- *Flora*: wild olive, thyme, redwood, pine, cedar, evergreen oak, cork oak, plants with tuberous roots (tulips, lilies)

Population and settlements

America = San Francisco bay, Los Angeles conurbation, San Diego and Tijuana, Santiago de Chile, Valparaiso, Concepción

Mediterranean Sea = Costa Brava (Barcelona), Costa del Sol (Almería, Málaga), Côte d'Azur (Nice, Cannes, Monaco), Marseille, Costa Liguria (San Remo), Genova, Napoli, Palermo, Trieste, Venezia, Rimini, Rijeka, Split, Athens, Thessaloniké, Tetouan, Alger, Tunis, Tripolis, Alexandria, Tel Aviv-Yaffa, Beyrut

Africa = Cape Town

Australia = Perth, Adelaide, Melbourne

Agriculture and Industry

Tourism = main activity, many destinations => lot of incomes (Spain, Italy, France, Greece, Portugal, Croatia), seasonal labour, during winter people work in cities (e.g. Northern Italy)

- Positive effects of tourism = contribution to GDP, creating of employment
- Negative effects of tourism = crime, waste => soil and water pollution

Social problems

Problems with irrigation => droughts => fires, deforestation (more arable land needed), large urbanisation of (coastal) cities

Keywords:

Mediterranean Sea, rendzinas, terra rosas, intrazonal soils, calcium carbonate, carbonation, flowering, seeding, waxy cuticles, needle-like leaves, squirrel, pine, oak, conurbation, Costa Brava, destination