

Plants in Arid Lands and Their Utilization (6)

PART 6: Halophytes



Along the Arabian Gulf coast in UAE, there are many places with saline and moist soil called "Sabkha", which is very flat and gentle plain. A hard layer is often formed on the surface and most of the area is made of highly saline sandy soil. In the Sabkha area, soluble salts in the soil accumulate on the surface due to evaporation from the soil. In winter, water is generated by dew condensation, and the water rises by

capillarity effect to near the surface, which sometimes forms salt lake. Sabkha is lying near Dubai city and from south to west of Abu Dhabi city. At the border to Saudi Arabia, a large salt accumulated land, "Sabkha Mutti", spreads. Major vegetation around the Sabkha includes *Zygophyllum hamience*, *Salsola* spp., and *Tamarix* spp. Mangrove trees grow in intertidal zone near the coast.

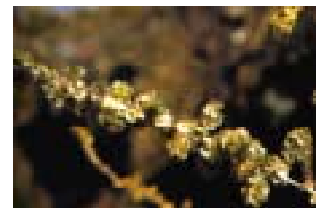


1) *Salsola baryosma*



Characteristics: Perennial plant which grows up to 50cm tall. Young branches and sprouts are red or purple. The color turns into gray-green as it becomes woody. Flowers bloom from July to November. Seeds ripe simultaneously.

Condition of growth: Seen near the coast where soil salinity is high. Strong halophyte.



Others: "Salsola" originated from "salsus", which means "salt" in Latin.

2) *Avicennia marina* (A kind of mangrove)



Characteristics: Grows up to 6 to 8m tall under preferable conditions. The surface of leaves has salt glands which discharge the salt taken inside the plant. Flowers bloom from May to July and bear fruits from August to September.

Condition of growth: Grows in intertidal zone near the coast. Seen at Abu Dhabi, northern coast, and eastern coast of UAE.

Use: Firewood, materials for construction or fishing boats, animals feeds. They provide



good living environment for propagation of fish, prawn, crab and shell fish. They also function as natural breakwater and reduce the damage of storm or flood tide.

Others: "Mangrove" is the generic name of trees growing in brackish water area.