

**Lecture 6: II. The Red Sea Region**  
**4<sup>th</sup> Year Students (Flora لائحة قديمة)**

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**Location and climate**

**This coastal strip extends from Suez Sudanian borders. It occupies about 1100 km long , and it is characterized by coral reefs and lagoons. The Red Sea coast is much more dry and less rainy than the Mediterranean Sea. It is hyperarid, annual rains not exceeds 3mm/yr.**

**Habitat types and vegetation along the Red Sea coast**

- a) Sea water habitat type
- b) Mangrove habitat type
- c) Salt marsh habitat type
- d) Wadis habitat type
- e) Mountain habitat type

### **a) Flora of Sea water habitat type**

Macroalgae (seaweeds) in the Red Sea are *Sargassum*, *padina*, *codium* and *Turbinaria* .

seagrasses are : *Halophila stipularis*, *H. ovalis* *Halodule uninervis*, *Cymodocea ciliata*, *C. rotundata*, *C. serrulata*.

### **b) Mangrove habitat type**

*Avicennia marina* and *Rhizophora mucronata*. *Avicennia* are common trees.

### **c) Salt marsh habitat type**

*Halocnemum strobilaceum*, *Arthrocnemum macrostachyum*, *Zygophyllum album*, *Nitraria retusa*, *Suaeda monoica* and *Tamarix nilotica*

### **d) The Coastal Wadis habitat type**

The flora of these wadis are dominated by xerophytic vegetation e.g. *Acacia raddiana*, *Ochradenus baccatus*, *Calotropis procera*, *Zilla spinosa*,

### **e)The Coastal Mountain habitat type**

*Acacia raddiana*. *Leptadenia pyrotechnica*, *Retama raetam* and *Panicum turgidum* *Capparis spinosa*, *Cocculus pendulus* , *Ficus pseudosycomorus* and *Moringa peregrina*.

## NOTES ON PLANTS OF POTENTIAL VALUES in the Red Sea



**Photo 1.** Browsing of *Avicennia marina* (أشجار القرم –) by Camels.

*A. marina* is mangrove tree stable anchored in the muddy shore of the Red Sea coast. It has a massive growth in the area south Marsa Alam, especially along the shores of Wadi el-Jimal delta (and its island), Wadi Lahamy and Wadi Qula'an. *Avicennia* plants are able to survive in salt marshes without regular supply of freshwater input. Also, the mangrove plants are able to grow on coastal dunes and build phytogenic mounds.

*Avicennia* bears viviparous seeds (propagules), which are easy to collect and transplant.



Photo 2. *Balanites aegyptiaca* (Ijleej or Balah Haraara – بلحة حرة)

It was one of the most widespread trees in ancient Egypt. The hard woody stones of its fruit have been found in prehistoric, Pharaonic and Graeco-Roman sites. A large undisturbed populations of *Balanites* occupy the upstream part of Wadi el-Jimal. Small populations or single individual trees occur in the other wadis of the Red Sea in the southern section. The height of the mature tree ranges from 6 to 12 meters.





Photo 4. *Calotropis procera* (Oshar – العشار) in Wadi El-Jimal

It is shrub or small tree with broad or ovate leaves. Flowers outside green and inside pink in terminal clusters. Fruit is smooth, apple-like and spongy. It has been recorded in Wadi el-Jimal.



Photo 6. *Capparis spinosa* (Lasaf – اللصف) in Wadi Ringa

It is a perennial shrub that grows successfully between large rocks. The green fruits are used in pickling, when ripening turn into shining red color. If the fruits are eaten or damaged the plant releases 'mustard oils', giving a



distinctive taste. Many wild animals such as rodents and birds find the fruits platable.



Photo 9. *Salvadora persica* (Arak-الأراك ) in Wadi El-Jimal

It is a large undisturbed shrub present in the downstream part of Wadi el-Jimal. The underground stems of this plant contain chemicals which are highly beneficial if used for dental care.



Photo 10. *Solenostemma argel* (Hargel –الحرجل) in Wadi El-Jimal



It is a perennial undershrub with a medicinal value. It is distinctive plant with numerous erect stems and white flowers arranged richly in an umbel. The plant is endangered. It is heavily collected from the natural habitats to be sold in the Attarin shops.



**Photo 11. *Phoenix dactylifera* (Date palm-نخيل البلح) in Wadi El-Jimal**



**Photo 12. *Hyphaene thebaica* (Doom-الدوم) in Wadi El-Jimal**

It is a fan palm that might reach a height of 20 m. It produces very platable brown fruits with extremely hard skin. It does not need artificial pollination as incase of date palm. The different parts of the plant have different uses.



**Photo 13. *Citrullus colocynthis* (Handal-الحنضل) in Wadi El-Jimal.** It is creeping xerophyte, common in the different wadis.





**Photo 19.** *Acacia tortilis* (Samar-السمر) in Wadi Abu Ghsun. It occurs in large numbers. It is characterized by the umbrella shape.



**Photo 20.** *Acacia raddiana* (Handal or Seyal - سيال) grow in abundance in the different wadis. It is characterized by its solitary trunk and its round irregular crown.