



## Date palm pollination

Training workshop

Muscat-Oman: 9-11 March 2015

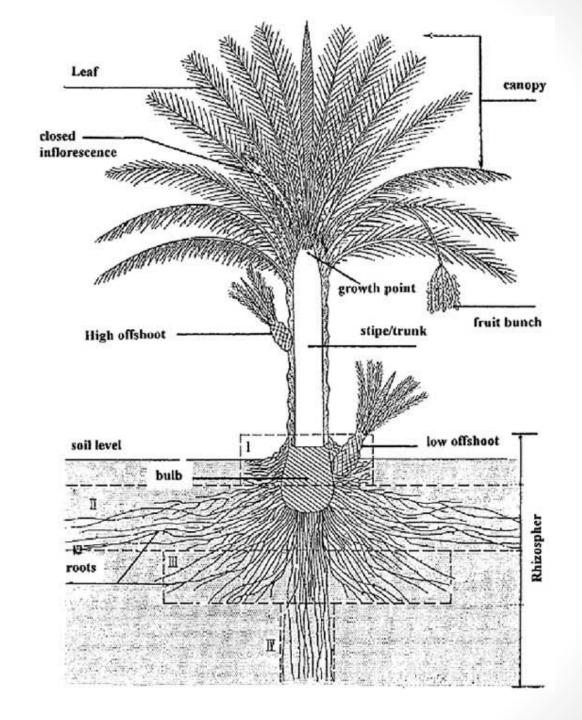
Dr. Mohamed BEN SALAH-Date palm Coordinator in GCC Countries

#### Session 1

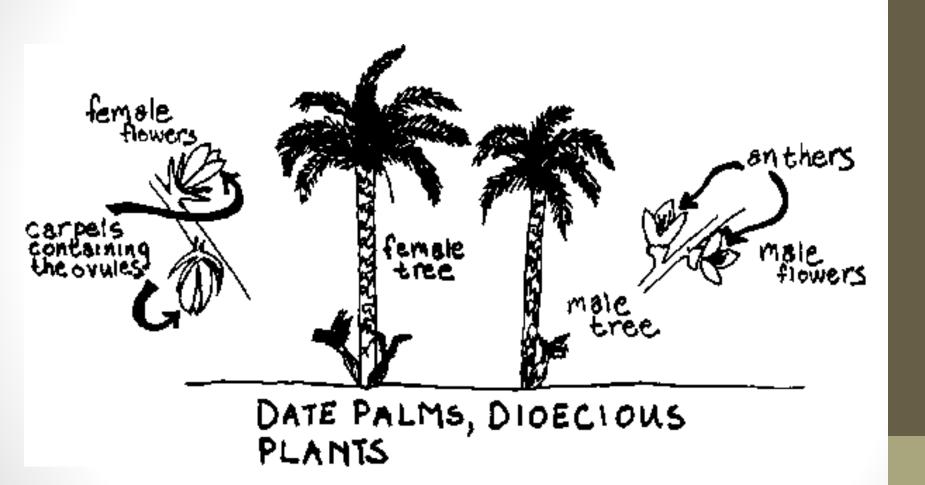
- -Date palm female and pollinators
- -Propagation and cultivation of pollinators

Expand Your Horizons (EYH) project at AMIDEAST

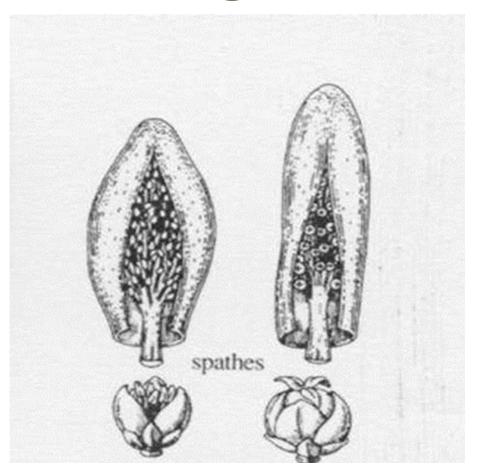
# Date palm phenology



#### Date palm is dioecious plant



### Date palm flowering



Male flower

**Female flower** 

### Spaths

- The spaths are the envelopes that enclose the inflorescence until they mature.
- They push up through throe fibrous sheaths that form the frond bases.
- At first, they are green; they later turned brown, and split longitudinally when the enclosed inflorescence becomes mature.





#### Inflorescence

 When the spath splits, it revealed the inflorescences.

 Inflorescence It seen to consist of a main stem or peduncle and of a number of spikelet's arising near the apex.





#### Flowers

The flowers are small, yellowish, coriaceous, sessile and borne at the bends of the spikelet's.

- Male flowers have three sepals, three petals, six stamens and erect anthers.
- The female flowers have three sepals, three rounded imbricate petals, six staminodes and three free carpels.
- In pollinated flowers, usually tow carpels abort and only one ripens. The aborted carpels persist as tow brown spots on the calyx of ripe fruits.





#### Development of female flower to fruit



#### Propagation of date palm by offshoots

As for female offshoots, some precautions are needed

#### Preparing the hole of plantation



#### Removing the offshoot



#### **Planting offshoot**



#### Packing the soil around offshoot



