



## **The impact of vegetation cover on temperature .**

**( تأثير الغطاء النباتي على درجة الحرارة )**

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## **Abstract**

Vegetation cover plays an important and serious role on temperature and it also affects humidity over the landscape of our Earth .Vegetation cover relieves harmful and dangerous effects of temperature . Our environment is affected seriously by the rate of the vegetation cover over our landscape . Its effects are clearly shown through the kinds of the plants and trees we plant and grow . Our desert climate forced us to plant and grow plants and trees that can bear and live in high degrees of temperature . One of the well-know trees , that can bear and live in these high degrees of temperatures is palm trees. Palm trees were mentioned about 20 times in different locations . The home of palm trees is in Iraq and the Arabian Peninsula and the Gulf states, Morocco, Libya and Algeria, and the palm tree is one of the dioeciously plant . They are ones of the oldest trees that are planted by man because they are east to cultivate and they don't need unsustainable circumstances of air and climate to be cultivated. In this research paper we will also mention the role of palm trees in improving the degrees of temperatures and humidity in areas that have palm trees compared with areas that don't have palm trees .

## **Research Questions and Hypotheses :**

1- Does the palm tree as a vegetation cover have an effect on temperature and humidity ?

2-Why have people paid attention to palm trees for many years ?

## **Materials and method**

Globe devices use to measure the temperature of the soil, air and moisture

The use of the school garden.

## **Data summary**

mix	min	Nor mal .T.	Mix.H	Min.H	humidity	Min.T	mix.T	N.t	data	
24.2c	27.4c	27.3c	49%	43%	45%	24.3c	26.8c	25.5c	7/2/2018	Without palm
22.1c	27.2c	22.1c	49%	35%	36%	22.5c	26.1c	25.3c	7/2/2018	With palm

## **Analysis and results:-**

Date palm is cultivated in arid and semi-arid regions which are characterized by long and hot summers, no (or at most low) rainfall, and very low relative humidity level during the ripening period. Exceptional high temperatures ( $\pm 56^{\circ}\text{C}$ ) are well endured by a date palm for several days under irrigation. Palm trees have direct effect on temperature .The table above shows clearly the relation between temperature and climate change . It is obvious that palm trees relieve and lessen the degrees of temperatures , that can help and allow others plants to be grown .

### **Palm trees and humidity :**

Depending on air humidity at the locality of a date palm plantation, various advantages and/or disadvantages are found. In fact, the date palm eco-system is mostly of an arid nature where air relative humidity has a large influence.

In the presence of high air humidity, some leaf diseases, such as *Graphiola* leaf spot (*Graphiola phoenicis* Moug. Poit.), are becoming more prevalent, while others, such as the Date mite (Bou-Faroua), become rare or absent. On the other hand, when air humidity is low, fungal diseases are absent, while pest and mite attacks are dominant.

Air humidity also affects the date quality during the maturation process. At high humidity, fruits become soft and sticky, while at low humidity they become very dry (case of Northern Sudan and in-land plantations). This phenomenon is strengthened when low humidity is coupled with hot and dry winds (called Chili in Tunisia, Chergui in Morocco, N-W in Iraq, etc.).

### **Great interest and care of palm trees .**

Along years , great and intensive care has been paid to palm trees .

People and governments have planted palm trees for several reasons

- 1. Instant Landscape** – this is by far one of the greatest benefits for growing palm trees. It only takes a few specimens but even at 1-2m high they can quickly transform bare dirt into a seductive oasis.
- 2. Low Maintenance.** As far as many of our trees and plants go, the palm tree competes only with the conifer for the least maintenance required. They don't need regular watering nor copious amounts of nutrition and will hold up with a minimum amount of fuss. They are susceptible to very few pests and diseases and if they do happen to die, you could also pick up another one at Bunnings on the weekend.
- 3. Lite Feeders.** Unlike roses which are Light Feeders (whenever it's light they start feeding) palms are truly lite feeders. Jenny Craig devotees could learn a lot from these plants. They source their nutrition from the most unassuming places and can thrive on such minimal amounts of content.

For those who can't help but fertilise their plants, you may want to hold back on these specimens. Instead, stick with an annual, or biennial, slow-release.

**4.Hundreds of Different Types of Palm Trees.** For the gardener choice is crucial which is the reason petunias are available in a myriad of colours, patterns and flowering shapes. They're still the same plant but we like to disguise it on the grounds of novelty attraction.

**5.Storm-proof.** If you've ever seen footage of a cyclone or tornado lapping a coastal district you won't have missed the palm trees being violently swayed in the gusts. Yet, despite the onslaught most manage to survive undeterred while other plants are unceremoniously plucked from their habitats and discarded miles away.

The palm tree has an amazing root system that will hold it firmly in situ and just bend and sway against any strong winds. This means you will rarely have one falling on top of your house or crashing through your recently added pergola.

**6.Survive in most climates.** While many of our palms are tropical or sub-tropical and reside in coastal locations there are a few varieties that can also survive cold climates and even grow in higher altitudes. If you're looking for some varieties for your areas .

**7.Will Grow in Most Soil Types.** Palm trees can grow in most soil types as well.

While their preference is for sandy soils, or sandy loams, they have been known to grow in clay quite well. The trick to getting them started in such a contrasting soil type is to plant them in a large hole that is back-filled with river sand. This will help them get established and then they can learn to grow the clay as they mature.

**8.Mature Palms are worth BIG.** Once your palm tree has matured it can become quite a valued piece of property. Depending on the type of palm, many can be transplanted quite successfully. These are always in high demand by home-owners, landscapers and sometimes even botanical gardens.

**9.Fool-proof.** I have yet to see a palm that couldn't be grown by just about any type of gardener, including the ultimate novices. All the benefits listed above direct themselves to this remaining point – they are not a tough plant to grow.

## **Conclusions**

Vegetation cover is the main factor in keeping our landscape green by relieving and lessening the high degrees of temperatures . There are other great benefits for palm trees .

## **Discussion**

Spreading the palm tree in hot weather areas helps reducing the temperature and modifying humidity degrees .

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