



GARDENING WITH THE MOON

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WHERE DID IT START?

Nile Valley



Euphrates Valley

NILE VALLEY



EUPHRATES VALLEY



CONSTELLATIONS

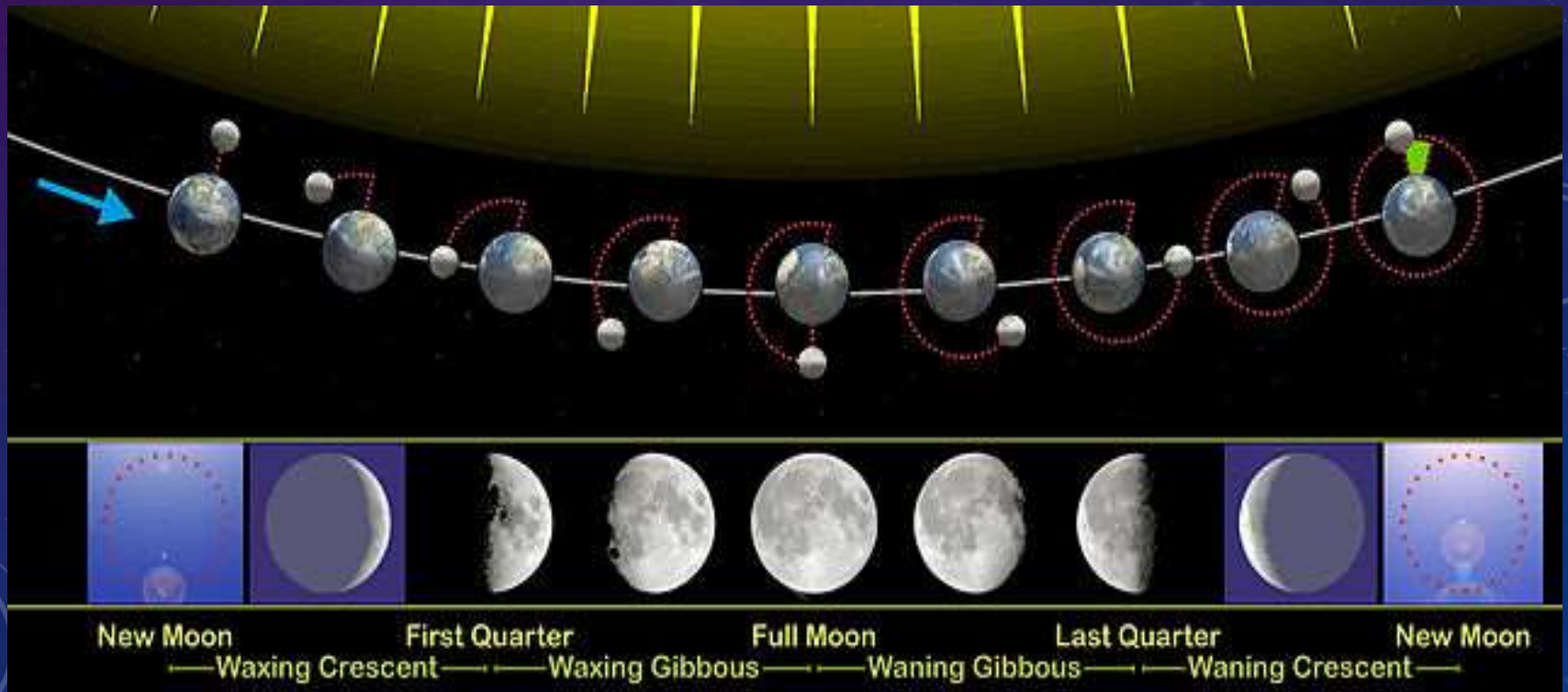


THINGS TO CONSIDER

- Phase of the moon
- Path of the moon
- Distance of the moon from the earth
- Recommended optimal times for roots, leaves, flowers or fruit

WHAT DO THESE TERMS REFER TO? –MOON PHASES

- New moon in alignment with earth and sun – no visibility
- Waxing phase – surface becomes more visible
- Full moon – whole face is illuminated
- Moon moves towards the sun - visibility decreases



WHAT DO THESE TERMS REFER TO? –MOON PATH

- Due to inclination sometimes the moon appears higher in the sky above the horizon – ascending moon
- Sometimes you can watch the moon go down into the horizon – descending moon

WHAT DO THESE TERMS REFER TO? MOON/EARTH DISTANCE

- Distance between moon and earth varies
- 406700 km away = APOGEE
- 356000 km away = PERIGEE
- 27 days 13 hours 18 mins to pass from 1 perigee to another
- Certain points in between are called lunar nodes

WHAT DO THESE TERMS REFER TO? MOON/EARTH DISTANCE



WHAT DO THESE TERMS REFER TO?
MOON/EARTH DISTANCE

- When the moon is at its closest (Perigee), the diameter appears 12% bigger

WHAT DO THESE TERMS REFER TO? RECOMMENDED OPTIMAL TIMES

- The position of the moon moves through groups of zodiac constellations

1. Fire group
2. Earth group
3. Water group
4. Air group



WHAT DO THESE TERMS REFER TO?

ZODIAC CONSTELLATION GROUPS

- Fire signs

1. Aries the ram
2. Leo the lion
3. Sagittarius the archer



WHAT DO THESE TERMS REFER TO?

ZODIAC CONSTELLATION GROUPS

- Earth signs
 1. Taurus the bull
 2. Virgo the virgin
 3. Capricorn the goat

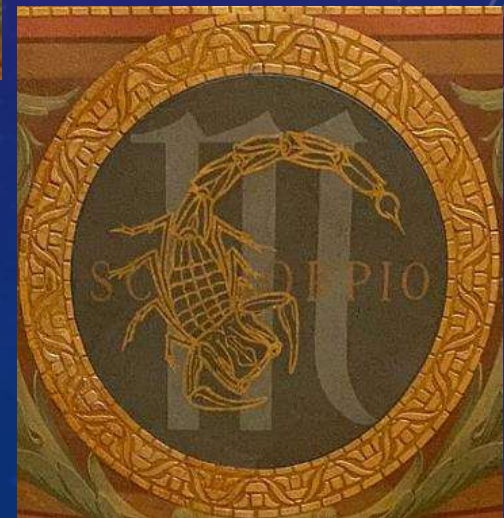


WHAT DO THESE TERMS REFER TO?

ZODIAC CONSTELLATION GROUPS

- Water signs

1. Pisces the fish
2. Cancer the crab
3. Scorpio the scorpion



WHAT DO THESE TERMS REFER TO?

ZODIAC CONSTELLATION GROUPS

- Air signs

1. Aquarius – water carrier
2. Gemini – twins
3. Libra - balance



ADVICE FOR GARDENERS

MOON PHASES

- During a waxing moon, plants harvested will last longer, so it is a good time for harvesting and storage
- During a waning moon, medicinal and aromatic plants will taste better and have better healing properties

ADVICE FOR GARDENERS

MOON PATH

- Ascending moon is a good time for taking cuttings
- Good time for grafting plants
- Good time for mulching
- Good time for harvesting leaves, fruit and flowers, especially grapes

ADVICE TO GARDENERS

MOON PATH

- Descending moon is a good time for planting, transplanting and repotting
- Good time for trimming and pruning
- Good time for weeding ,mowing and watering
- Good time for harvesting tubers and roots

ADVICE TO GARDENERS MOON/EARTH DISTANCE

- Apogee, perigee and lunar nodes are a bad time for gardening
- Avoid gardening for 4 hours before and 4 hours after these events
- Gardening by the moon calendars will show this information

ADVICE TO GARDENERS OPTIMAL DAYS

- Consult your gardening with the moon calendar
- When the moon is in a fire sign, it has an action on the ripening of fruits



ADVICE TO GARDENERS

OPTIMAL DAYS

- Consult your calendar
- When the moon is in an earth sign it has a positive action on underground root crops



ADVICE TO GARDENERS

OPTIMAL DAYS

- Consult your calendar
- When the moon is in a water sign, now is a good time for leafy vegetables that contain a lot of water



ADVICE TO GARDENERS

OPTIMAL DAYS

- Consult your calendar
- When the moon is in a air sign, it is favourable for ornamental flowers
- Also vegetables such as cauliflower, broccoli, artichokes



REASONING BEHIND THIS ADVICE

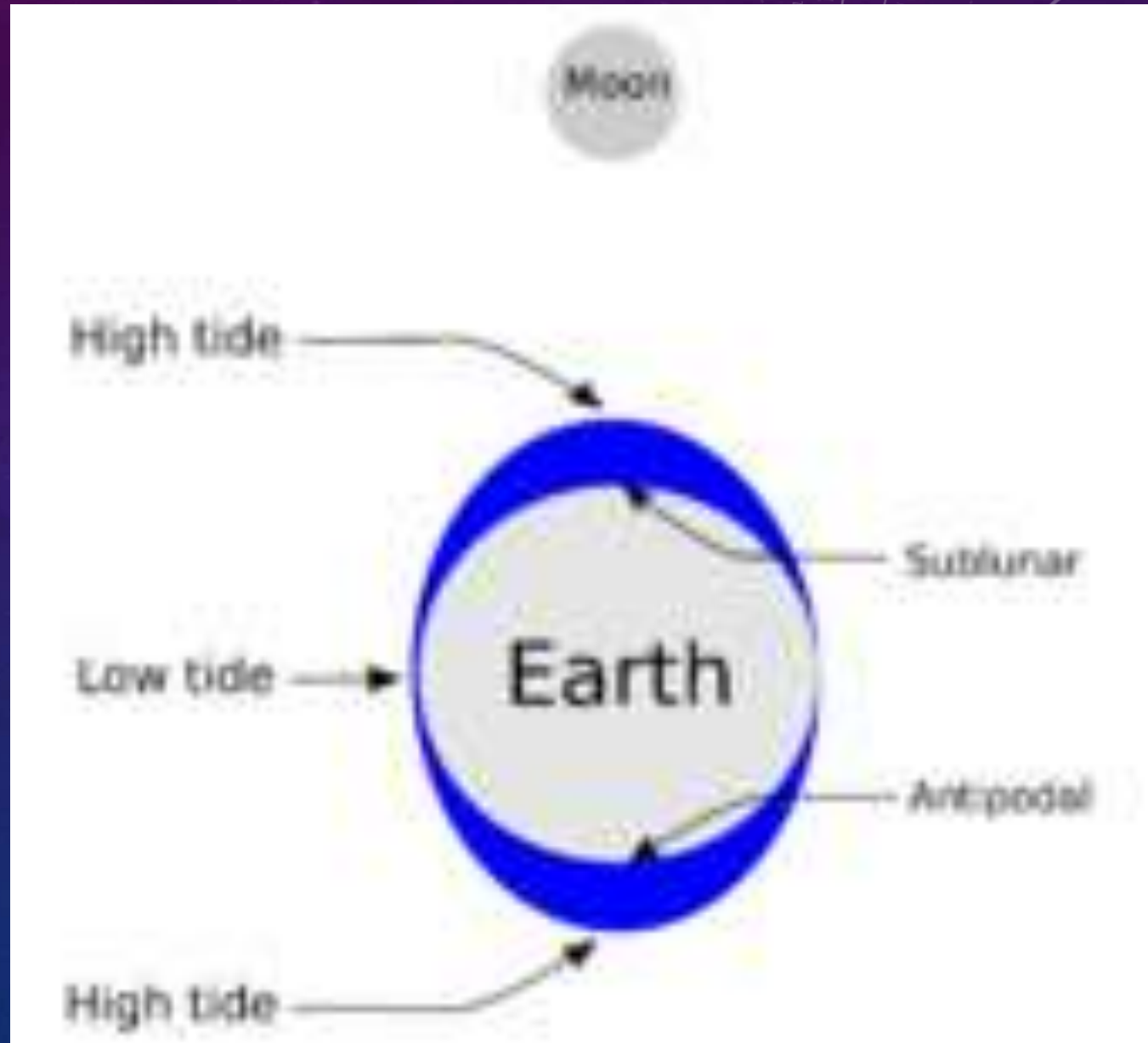
- Influence of phases of the moon
- Plant growth depends on light availability
- More light is available when the moon is full



REASONING BEHIND THIS ADVICE

- Influence of path of the moon
- Whole planet is constantly bulging and changing shape due to gravitational forces of sun and moon
- Gravitational pull causes ocean tides
- Highest tides occur in spring and autumn, coinciding with planting and harvesting

REASONING BEHIND THIS ADVICE



REASONING BEHIND THIS ADVICE

- If the moon can pull large oceans, then smaller bodies of water are also affected
- During the ascending moon, the water in the upper parts of plants is affected
- During the descending moon, the roots and soil are affected

REASONING BEHIND THIS ADVICE

- Influence of distance of the moon
- When the moon is at its closest (perigee), any influence will be strongest
- When the moon is at its furthest (apogee), influence is weaker
- Lunar nodes affect the weather, making it more unsettled



REASONING BEHIND THIS ADVICE

- Influence of Zodiac constellations
- Ancient civilisations would have relied on the position of stars in the sky throughout the year to indicate when to prepare for planting and harvesting.



REASONING BEHIND THIS ADVICE

- Gardeners have always had to consider the conditions that affect plant growth
- In the absence of weather data, they traditionally equated the groups of star signs as influencing these conditions



REASONING BEHIND THIS ADVICE WARMTH

- Warmth accelerates plant metabolism
- But too much and there is a risk of plants drying out
- Using a greenhouse, cloche or fleece can mitigate cold weather



REASONING BEHIND THIS ADVICE

DRYNESS

- Dryness limits the proportion of water in the plant tissues
- Drought leads to plants maturing too quickly



REASONING BEHIND THIS ADVICE COLD

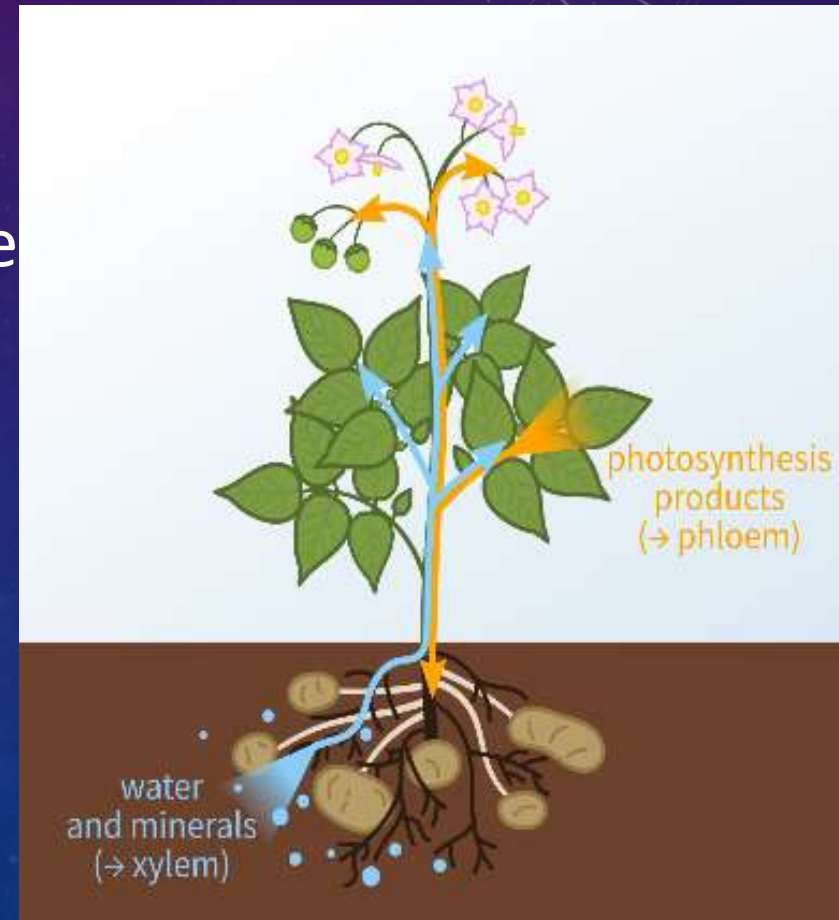
- Cold slows down plant metabolism
- But can help plants to resist unfavourable conditions



REASONING BEHIND THIS ADVICE

MOISTURE

- Moisture is essential because without it, plants will shrivel
- Main nutrients of plants are distributed by water



REASONING BEHIND THIS ADVICE

ZODIAC SIGNS

- Fire signs = warmth and dryness
- Earth signs = cold and dryness
- Water signs = cold and moisture
- Air signs = warmth and moisture

SCIENCE BEHIND THIS ADVICE

- Both scientific studies and anecdotal evidence over thousands of years have shown that plants are affected by
 1. Light
 2. Available water
 3. Weather conditions

SCIENCE BEHIND THIS ADVICE

- It is plausible that the moon may affect these factors
- BUT – so far scientific studies have been inconclusive.

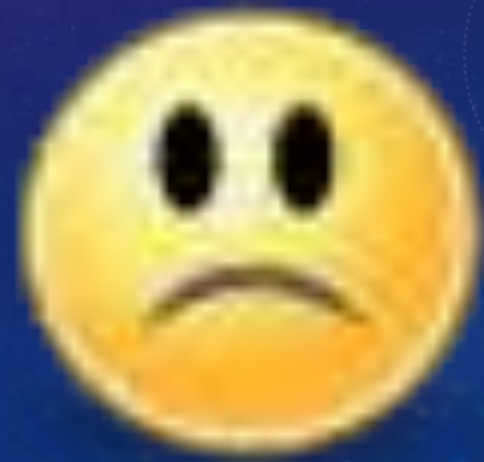


SCIENCE BEHIND THIS ADVICE

- Journal of Agronomy 2020 10(7),955
- Olga Mayoral, Jordi Solbes, Jose Canto, Tatiana Pina –University of Valencia, Spain
- Examination of plant-science related textbooks and peer-reviewed journal articles

SCIENCE BEHIND THIS ADVICE

- “We found that there is no reliable, science-based evidence for any relationship between lunar phases and plant physiology”
- “Nor does evidence from the field of physics support a causal relationship between lunar forces and plant responses”



SCIENCE BEHIND THIS ADVICE

- Moonlight is from 100 to 100 times less intense than sunlight, so any effect is very weak
- The moon's gravitational pull affects oceans and large lakes, but any effect on soil water tables would be minimal

SCIENCE BEHIND THIS ADVICE

- Influence of the zodiac
- You either believe in it or you don't
- If you do, buy a book or consult a website daily
- People who follow moon gardening tend to invest more in the maintenance of their plants than the average gardener

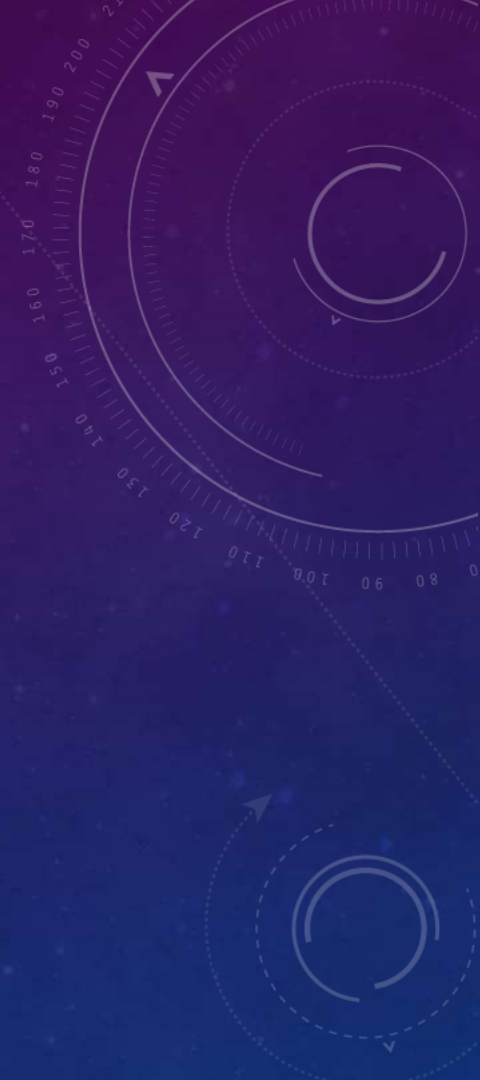
SCIENCE BEHIND THIS ADVICE

- It is probably not better technique giving the good results
- It is probably meticulous care paying off



IF YOU HAVE THE TIME TO FOLLOW MOON GARDENING

- Thursday 16th March
- Moon ascending
- Waning
- Root Day



YESTERDAY WAS

- A good day for weeding



YESTERDAY WAS

- A good day for sowing or planting of root vegetables



YESTERDAY WAS

- A preferred time for storing fruits



YESTERDAY WAS

- A favourable time for collecting and preserving root vegetables



TODAY

- Same advice as yesterday
- But refrain from watering plants

TOMORROW

- Same advice as Friday
- Plant radishes and turnips

SUNDAY 19TH MARCH

- The moon has moved from Capricorn into Aquarius
- Lunar perigee
- DON'T WORK IN THE GARDEN



MONDAY 20TH MARCH

- Don't store fruit
- Water plants



MONDAY 20TH MARCH

- Sow Nigella and Larkspur



MONDAY 20TH MARCH

- Mow the lawn



CONCLUSION

- Gardening with the moon requires a lot of time and patience
- The advice might not coincide with weather conditions on any particular day
- Books and almanacs are available
- If you do it, please share your experiences

