

PQNK fully supports tropism



Question raised by Mr. Rakesh Rajistan India in PQNK farmers learning groups on WhatsApp

“Sir, does PQNK support any type of tropism theory? If yes, how do phototropism, hydrotropism, geotropism, and acoustic tropism affect plant growth and yield? Please explain how each of these theories works. If any farmer has any experience with any of these theories, please share it. Thank you”

PQNK answers:

Thank you for raising this question. It is highly relevant to PQNK.

Yes, PQNK fully supports tropism, because tropism is not a theory invented by humans—it is a **natural response system built into plants**. PQNK simply **creates the conditions in which these natural responses can function optimally**, without disturbance.

Let us understand this clearly.

1. What Is Tropism (PQNK Understanding)

Tropism is the directional growth response of plants to natural stimuli. Plants do not move, but they *respond* by growing in the right direction.

PQNK is based on one simple principle:

When soil, water, air, and biology are restored, plants automatically express correct tropic behavior.

PQNK does not “apply” tropism.

It **removes barriers** that block it.

2. Phototropism (Response to Light)

Scientific basis

Phototropism is the bending of shoots toward sunlight due to unequal distribution of the hormone **auxin**.

How PQNK supports phototropism

- Vertical canopy management
- Proper spacing
- No nitrogen forcing
- No chemical stress

Field effects under PQNK

- Leaves orient themselves naturally to capture maximum sunlight
- Uniform photosynthesis
- Strong stems
- Better flowering and fruiting
- Reduced disease (sunlight penetration improves air flow)

Farmer observation (common but often unnoticed):

Under PQNK, plants “stand correctly” without staking or forcing.

3. Hydrotropism (Response to Water)

Scientific basis

Roots grow toward zones with higher moisture.

How PQNK supports hydrotropism

- Deep hardpan breaking
- Permanent raised beds
- Living roots and mulch
- No soil compaction

Field effects under PQNK

- Roots grow deeper and wider
- Better drought tolerance
- No surface root dependency
- Efficient water use

Important clarification:

In compacted or chemically hardened soils, hydrotropism is **blocked**, not absent.

4. Geotropism / Gravitropism (Response to Gravity)

Scientific basis

- Roots show **positive geotropism** (grow downward)
- Shoots show **negative geotropism** (grow upward)

How PQNK supports geotropism

- Loose, oxygenated soil
- No plough-pan
- Undisturbed root channels
- Stable soil structure

Field effects under PQNK

- Strong anchorage
- Upright plants
- Better nutrient uptake
- Lodging resistance

Common mistake:

Frequent tillage confuses geotropic signals and weakens root architecture.

5. Acoustic Tropism (Response to Sound & Vibration)

Scientific status

This is an **emerging and partially established field** of plant science.

Plants respond to:

- Root-zone vibration
- Low-frequency sound
- Flowing water sounds
- Insect and chewing vibrations

PQNK position (very important)

PQNK does **not reject acoustic response**, but it also does **not depend on artificial sound stimulation**.

Why?

Because under PQNK:

- Living soil organisms already produce vibrations
- Flowing water in soil pores creates sound signals
- Root–microbe interactions generate biochemical and mechanical signals

In short:

PQNK creates a **naturally “noisy” soil**, biologically speaking.

6. Why Tropism Often “Fails” in Conventional Farming

Tropism appears weak when:

- Soil is compacted
- Roots are chemically burned
- Water movement is blocked
- Biology is dead
- Excess fertilizers override natural hormone balance

PQNK removes all of these barriers.

7. PQNK Summary Statement (Very Important)

Tropism is not something to be applied.

It is something to be allowed.

When:

- Soil breathes
- Water moves freely
- Roots are alive
- Sunlight reaches leaves

Plants automatically:

- Find light
- Find water
- Find depth
- Find stability

8. Invitation to Farmers (Group Participation)

Many farmers practicing PQNK have already observed:

- Deeper roots without effort
- Better plant posture
- Reduced irrigation demand
- Natural self-orientation of crops

We have 100's of testimonies in pictures and videos from farmers showing:

- root pictures
- lodging resistance examples
- drought tolerance experiences
- canopy behavior observations

This practical evidence is **more powerful than theory**; see **picture gallery below**.

Final PQNK Line

Nature already knows the theory.

PQNK simply stops interfering.

Pictures gallery

PQNK vs Conventional Root

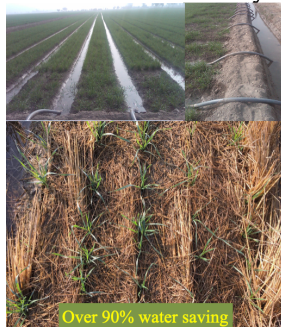


Lodging resistance



Drought tolerance

Agriculture services are still stuck with the Bana-Kiarri irrigation method as against the most efficient mulched raised-bed system.



Raised-bed irrigation systems save over 70% of water, and if properly covered with organic mulch, water saving is 100%. Rain, dew, and humidity in the air are more than sufficient to exceed this requirement. Additionally, buffering of microhazal fungi meets up with every deficiency.

Canopy behavior



Footnote

*PQNK (pronounced “picnic”)—the regenerative & sustainable **Pristine Organic Farming System**—is grounded in **Natural Ecosystem Science**. This science employs perennial biodiversity, protects soil with organic mulch, and avoids practices such as water inundation, tillage disturbance, and leaving soil bare.*

*It is the **process** that matters most. PQNK is a pristine production system designed not merely for yield, but for optimal, balanced output—where quality, sustainability, and ecological harmony emerge from a self-regulated, zero-external-input methodology.*

Connect & Resources

Facebook: [www.Facebook.Com/Pedaver](https://www.facebook.com/Pedaver)

YouTube (PQNK): <https://www.youtube.com/@pedaverpqnk3167/videos>

YouTube: <http://www.youtube.com/@aasifsharif>

PDF Knowledge Papers: <https://drive.google.com/drive/folders/1iadwV6mdUPyrUIpB3oRfNv6DLiackaUL?usp=sharing>

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