



r-jaal

आर-जाल

R-Jaal is designed for development of vigorous, robust and well spread root system solving many problems related to plant health from the source.

R-Jaal is categorized under bio-fertilizer and is based on spores and fragments of Vascular Arbuscular Mycorrhizal fungal filaments, infected root bits and lot of bio-enzymes and secondary metabolites.

R-Jaal colonizes the plant's root system and develops a symbiotic association called "Mycorrhiza". They form a network (Jaal) of fine filaments that associate with plant roots and extend the roots far into the soil resources; much beyond the area of nutrient depletion. This gives the plant a vigorous micro root development and multiplies the surface area of the root.

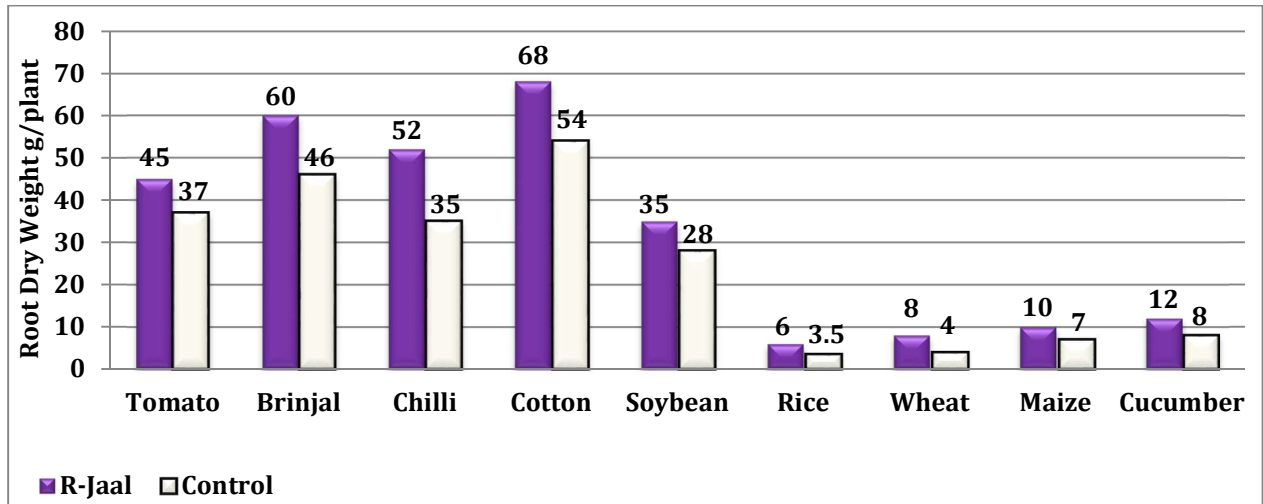
R-Jaal activated root structure enables the plant to draw nutrients and water from the soil that a plant would not be able to access otherwise. This fungus-plant alliance accelerates root development, stimulates nutrition uptake especially phosphate, repels soil bound infections, help plant survive in multiple stress.

R-Jaal also helps in soil aggregation process and stimulates microbial activity improving soil health.

R-Jaal is the trusted friend of all plant in all conditions - any crop, any time, with chemical fertilizers, only organic practices or any which way you may be growing the plants. Earlier the use, better the results.

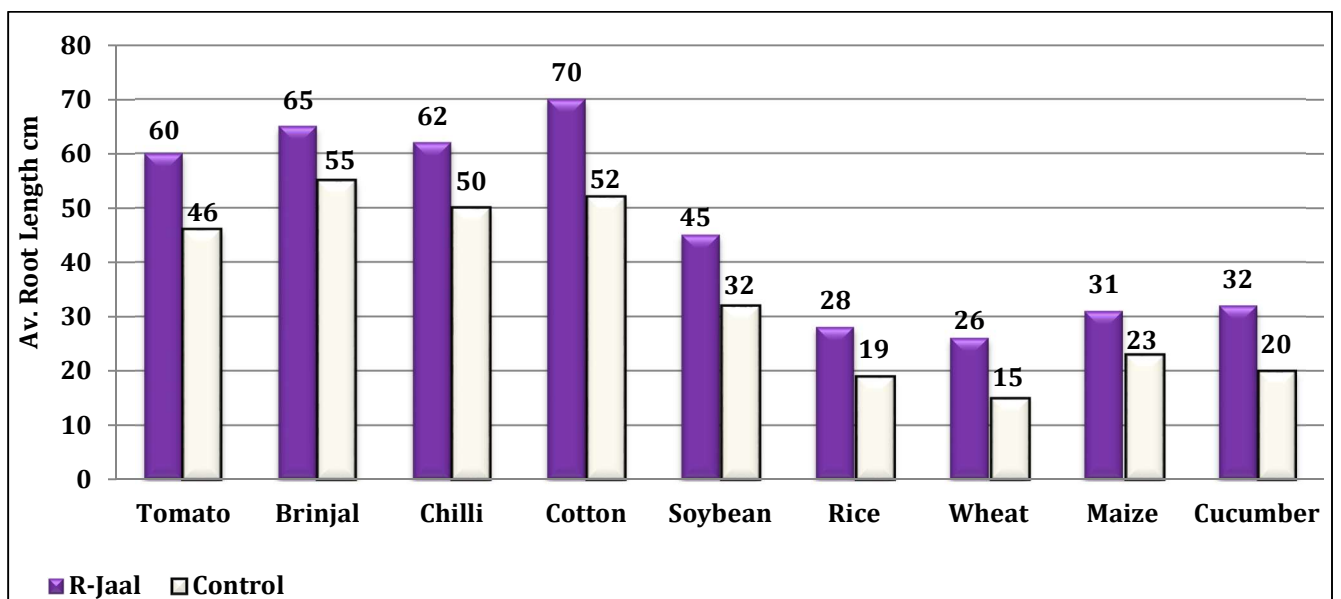
35% More Root Dry Weight with R-Jaal Impact

Treatments applied at **Sowing / Transplanting** of the plant and Observations were recorded at **Maturity**. It was clearly observed that plants treated with R-Jaal had around 35% more Root Weight in almost all the crops.








25% Longer Main/Secondary Roots with R-Jaal

Treatments applied at **Sowing / Transplanting** and observation were recorded at **Maturity**. The lengths of primary and secondary roots were over 25% longer in all the crops. If the plant is under stress the root length showed an increase of over 100% as well. This clearly indicated that R-Jaal prepared the plant for better stress handling.



200% Efficient Micro Root Network with R-Jaal

Micro roots are the final agents for absorption. R-Jaal treated plants have increases the reach of the plant beyond the area of nutrition depletion and drives the absorption of water and nutrition and also acts as the catalyst of soil based beneficial microorganisms.

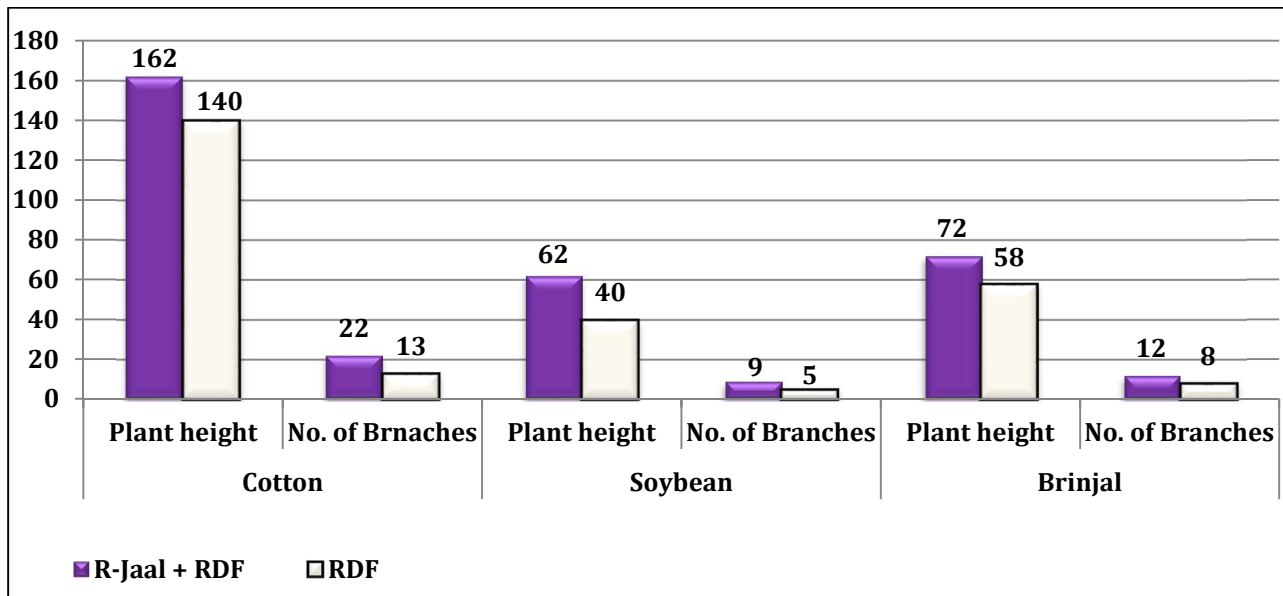
	With R-Jaal	Normal
Rice Nursery		
Tomato		
Onion		



Results Visible in all round growth with R-Jaal impact

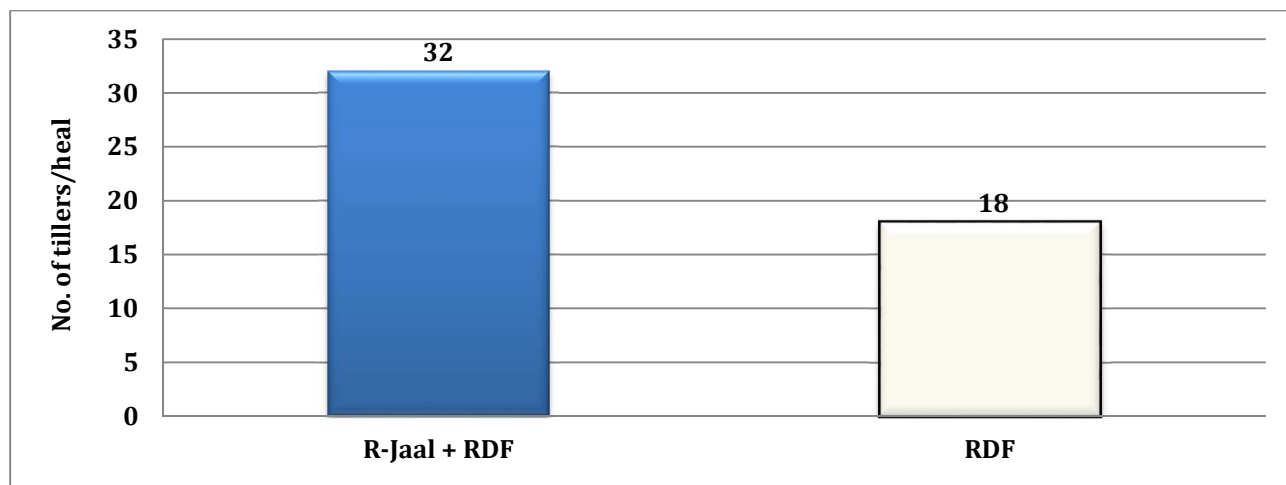
Better root system means a healthier plant. Plant height, No of branches, No of flowers, No of fruits everywhere the impact is visible. These are the automatic results due to the basic work done on the root system by R-Jaal.

Effect of R-Jaal on growth parameters of various crops



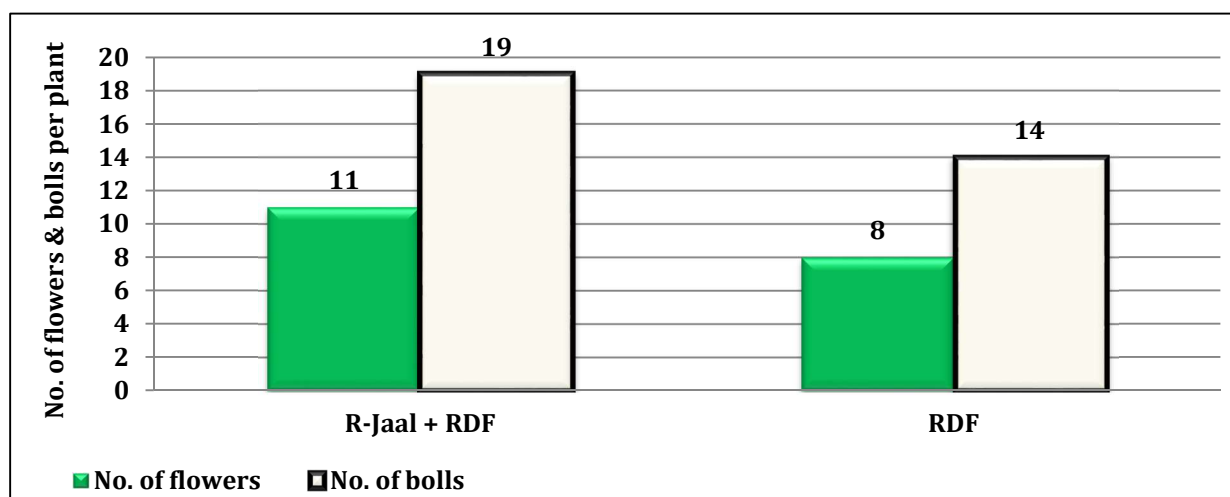
Treatments applied at **Sowing / Transplanting**, Observation recorded at **Maturity**

Effect of R-Jaal on no. of tillers per heal in Rice



Treatments applied on 16th July 2016, Observation recorded on 10th Aug 2016

Effect of R-Jaal on Yield parameters of cotton



Treatment applied on 25th Aug 2016, Treatment evaluated on 20th Sep 2016

The impact of R-Jaal on various functions can be summed up

Increased absorption of nutrients & water

R-Jaal powered root network helps to absorb and mobilize primarily phosphorous along with other important macro and micro elements like zinc, cobalt, magnesium, iron, copper, molybdenum etc and water. Even in low nutrient soil R-Jaal is of great help for plants. The higher volume of micro-root network created by R-Jaal retains moisture around root zone.

Enhance stress tolerance capacity

R-Jaal offers tolerance against a range of soil stresses like low soil moisture, water logging, heavy metal toxicity, salinity, high or low temperatures etc thus enhances the chances of plants survival immensely. The following situation explains the subject in a better way.

A Dry Spell can be a Killer

The changing weather condition seems to be developing a habit of giving weather sock. A dry spell of 15-20 days is visible very regularly. The mortality in such case is very high. It does rain but by the time it rains the plants are already dead. Even when it rains, the plant takes time to recover from the shock. Losses reported in the range of 15% -100%.

R-Jaal leads to even better root zone development in such stress. The root network in such case is more than 200% as powerful as is otherwise. This gives the R-Jaal supported plants an extra fighting ability of 10-15 days. Beyond mortality the deep penetrated root system also helps the plant recover from the shock very quickly.

In case of large trees, R-Jaal supported plants can actually survive a complete dry seasons as well.

High Velocity Wind can Up-root the Plants

Heavy wind conditions can uproot many plants. The depth of R-Jaal supported roots keeps them grounded and reduces the chance of up-rooting by up to 70%.

Water Logging can destroy the Root System

Heavy rain at times can create some water logging. If sustained for some time, this can lead to complete destruction of root system and finally plant mortality. R-Jaal root system being deep enough sustains the situation to save much of the root system and recover once the water recedes. Again protecting in over 50% cases.

Almost all such stresses are handled well by R-Jaal supported root systems of plants.

Disease control agent

R-Jaal is a potential plant disease controller agent offering plants with higher resistance to various soil and root-borne pathogenic fungi and roots damage causing nematodes.

Improves the soil health

R-Jaal plays a major role in soil aggregation through hyphae networking and glomalin (biological glue), humic compounds production. Therefore, their presence in the soil is essential to maintain physical soil properties. Better soil structure results in - greater water infiltration & water holding capacity, better resistance to surface sealing (crusts), more permeability to air, better resistance to erosion (water/wind), better root development, higher microbial activity and nutrient cycling, better resistance to compaction.

Enhances the performance of biofertilizers

R-Jaal is compatible with other bio-fertilizer of different categories. Mycorrhiza colonization favorably effects the population of bio-fertilizers by favoring early establishment and efficacy of these bacteria's. For example it increases nitrogen fixation potential when given together with cultures like, Rhizobium by first stimulating the nodule bacteria in a sequential process by increasing the tissue phosphorus content resulting in improved nodulation.

Use in conventional, sustainable and organic production systems

The R-Jaal can be used in conventional, sustainable & organic production systems for the improvements in soil & plant health to maximize the yield.

Environmental safety

Being Environment friendly R-Jaal is Earthworm friendly, pet friendly, ecofriendly & does not disturb ecological balance.

Let us root out the problem with R-Jaal.

Be in touch with your Retailer or Green Earth Team member. You can also directly get in touch with us:

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www.greenearth.world