



NOVEL-SAKAL SAMARADHI ORGANIC LIQUID NUTRIENT



: MANUFACTURED BY :

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SAKALSAMRADHI ORGANIC LIQUID FERTILISER

Secondary Agriculture is a key to maximize that profit and the major share can be gained from the Agro-waste utilization to create wealth. Banana is the second most important fruit crop in India next to Mango. Its year round availability, affordability, varietal range, taste, nutritive and medicinal value makes it the favorite fruit among all classes of people. It has also good export potential. Banana is grown in about 120 countries. Total annual world production is estimated at 86 million tonnes of fruits.

Apart from fruit, banana crop generates also huge quantity of biomass in the form of pseudostem, leaves, suckers etc. At present, this biomass particularly pseudostem is absolute waste in most of the states of India to this practice of disposing pseudostem as waste which costs farmers about Rs. 12000 to 15000/ha. Disposal of pseudostem in routine ways i.e., dumping on field bunds and burning, disposing in nalla/natural drains etc. causing environmental problems.

The activities envisaged in the project are standardize processes for extracting textile grade fibres from pseudostem and prepare home furnishings, hand made papers as well as industrial levels from fibres and scutching waste based vermicompost in different crops and developing linkage for marketing of pseudostem based products. During the process of Fiber extraction, four components are obtained simultaneously. These components are fibre (600 – 800 kg/ha), scutcher (30 to 35 t/ha), sap (12,000 to 15,000 l/ha) and central core (8 to 10 t/ha).

Different Outputs of Banana Pseudostem



Novel – Sakal Samaradhi Organic Liquid Nutrients –

The Products contains not only essential plant nutrient but also plant growth regulators viz. NAA, cytokinin and GA3 as well as some beneficial soil conditioning as well as waste decomposing organisms. It also contains bacteria which can improve soil health and can be useful in different stages of plant growth e.g. vegetative development, Flowering, Fruit setting, Fruit development etc. It also contains bacteria which can improve soil health and can be useful in different stages of plant growth e.g. vegetative development, Flowering, Fruit setting, Fruit development etc.

S.no	Particulars	Information
1.	Product Features :	<ul style="list-style-type: none"> • 100% Pure Organic Product. • It supplies plant nutrients (N, P, K) including micronutrients. • It contains naturally occurring growth promoters. • It improves soil physical properties like structure, water holding capacity etc., • It contains botanical pesticides. • It increases the availability of nutrients.
2.	Product Benefits :	<ul style="list-style-type: none"> • The product which is used in agriculture to improve soil fertility and enhance crop productivity. • Enhance vigorous root development and growth. • It enhances total plant growth, number of flowers, maximum conversion of flowers into fruits and pods. • It is a growth promoter; it is very helpful in nursery plants. • It reduces fruit drop and increase fruit size and setting.
3.	Product Content :	<ul style="list-style-type: none"> • Banana Pseudostem Sap with, Natural Plant Extracts, Chemical Free plant growth regulators viz. NAA, cytokinin and GA3
4.	Product Quality :	<ul style="list-style-type: none"> • Liquid Form
5.	Product Strength :	<ul style="list-style-type: none"> • Poisonous effect on Insect – Pest. • They help farmers grow more food on less land by protecting crops from insect- pests as well as raising productivity per hectare. • Another valuable feature is that they achieve the increase of activity in bacteria and fungi that benefit the soil. • Long term environmental benefits as they are not contaminate lands and waters. • Far safer to the overall crop for both grazers and farmers. • No residual can be found as it is organic in nature.
6.	Product Weakness :	<ul style="list-style-type: none"> • It is non-chemical and pure organic the result will take little more time compared to the chemicals

Dosage of Organic Liquid Nutrient (OLN) in various crops

Sr.No	CROP	Total Application lifecycle	Ratio (OLN/Water)	Method	Crop Stage
1.	Grain Crops (Paddy, wheat, Maize, millets, etc)	3 Times	1L : 100L	Foliar Spray	<ul style="list-style-type: none"> 1st spray 2 weeks after Planting. 2nd Spray at Tillering Stage. 3rd Spray at Milking stage.
	Pulses (Grams, cowpea, Chickpea, Pigeon pea, etc)	3 Times	2 L : 100 L	Foliar Spray	<ul style="list-style-type: none"> 1st spray at 30 days after planting. 2nd Spray at 60 days interval, 3rd Spray at 90 days interval.
3.	Oil seeds (Cotton, sesame, soyabean, etc)	Every Month	1 L : 100 L	Foliar Spray	<ul style="list-style-type: none"> Every month (25-30 days intervals)
4.	Ground Nut	2 + 3	1 L : 100 L	2 : Fertigation 3 : Foliar Spray	<ul style="list-style-type: none"> 1st Fertigation at 15 days after sowing, 2nd fertigation at 30 days after sowing. Total 3 Foliar spray at 45, 60, 75 daysinterval
5.	Sugarcane	3 Times	1 L : 100 L	Fertigation	<ul style="list-style-type: none"> Every month intervals.
6.	<ul style="list-style-type: none"> Fruit crop (Mango, Bananana, Papaya, Guava, Citrus, Sapota, etc) 				
	Citrus, Guava, Papaya	Every month	1 L : 100 L	3: fertigation 9: foliar spray	<ul style="list-style-type: none"> 3 Fertigation after planting at every month interval, 9 Foliar spray at every month interval till crop end.
	Mango	3 Times	1 L : 100 L	Foliar spray	<ul style="list-style-type: none"> Foliar Spray after Flowering stage, Foliar Spray Pea Stage Marble Stage.
	Banana	3 + 2 Times	1 L : 100 L	3 : fertigation 2 : foliar spray	<ul style="list-style-type: none"> Fertigation at 1, 2, 3 month of planting. Foliar Spray after Bunch Initiation.
	Vegetables				
	Tomato/Brinjal/C hilly/okra	2 + 6	1 L : 100 L	2 : fertigation 6 : foliar spray	<ul style="list-style-type: none"> 2 times Fertigation at 20 days intervals. Foliar spray at fruiting stage on every 15 days intervals basis.
	Beans	4 Times	2 L : 100 L	Foliar spray	<ul style="list-style-type: none"> Every month intervals.
	Tuber crops (Potato, radish,carrot, onion,sweet potato, yams, garlic,ginger, etc)	2 + 4	1 L : 100 L	2 : fertigation 4 : foliar spray	<ul style="list-style-type: none"> Fertigation at vegetative stage Foliar spray at reproductive stage (every month intervals)
	Leafy vegetables (spinach, lettuce, Mint, parsley,coriander, etc)	Every week	1 L : 100 L	Foliar spray	<ul style="list-style-type: none"> Every week intervals
8.	Flower crops (Rose, gerbera, jasmine, marigold, tuberose, orchid,etc)	Every 15-20 days	1 L : 100 L	fertigation	<ul style="list-style-type: none"> Every 15-20 days intervals up to crop end.
9.	Plantation crops (tea, coffee, palms, rubber, cocoa. etc)				
	Tea, coffee, rubber	Every 15-20 days	1 L : 100 L	Foliar spray	<ul style="list-style-type: none"> Every 2 weeks intervals up to crop ends.
	Palms (coconut, bottle, date, oilpalm, etc)	Every month	1 L : 100 L	Fertigation	<ul style="list-style-type: none"> Every month intervals up to crop end.

SAKALSAMRADHI ORGANIC LIQUID FERTILISER



Land Scaping



All Major Fruits



All Major Vegetables



Suitable for Cotton



Suitable for All major Crops

SAKAL SAMRADHI ORGANIC LIQUID FERTILISER

Novel-Sakal Samaradhi is a unique product patented by ICAR, New Delhi and developed under Navsari Agriculture University. Considering the Nutrient rich composition of Nove-Sakal Saraddhi it is suitable for direct use in all agricultural crops and was tested for more than 25,000 Farmers field on different crops in Gujarat, Maharashtra, Madhya-Pradesh and Telengana states for large scale demonstration.

Based on all research studies, Novel-Sakal Samaradhi products can increase the crop yield by 15-20% with significant reduction in cost of production and it also reduces the load of chemicals by 15-20% The contents, results and recommendation for the farming communities are summarized as follow :

CONTENTS

Primary Nutrients:-

Nitrogen : 2000-3000 ppm
Phosphorus : 210-270 ppm
Potassium: 1500-2500 ppm

Secondary Nutrients:-

Calcium : 330-450 ppm
Magnesium: 970-9000 ppm
Sulphur : 130-170 ppm

Micro Nutrients:-

Manganese: 4-7ppm
Copper: 0.42-0.80 ppm
Zinc: 1.2-4.0 ppm
Iron 15-187 ppm
Molybdenum 0.2 ppm
Boron 2.4-2.7 ppm

Growth Hormones:-

Cytokinis: 330-450 ppm
Giberellic acid: 970-9000 ppm
Amino acids: 130-170 ppm

Culture:

Azotobactor 1x10Per ml
Rhizobium

These are the available contents to it.



SAKAL SAMRADHI ORGANIC LIQUID FERTILISER

Product Application :

It can be use in different crops in different stages by foliar spray as and when required. Effects of Novel - Sakal Samradhi Application on Yield of Different Crops.

Sr. No	Test Crop	Experimental Type and No. of Plots	Season/ Year	Yield Control Treatment		% Increase in overall control	Method of Application	Remarks
1	Onion (Open Field)	100	-	28.75 t/ha	47.9 t/ha	67%	Through foliar spray @100ml per 10 Liter of water in 3 Equal splits.	20% of saving Fertilizer
2	Garlic (Open Field)	100	-	4.58 t/ha	6.54 t/ha	43%	Through Drip @ 21/ha in 3 Equal splits	50% of saving castor cake
3	Leafy Vegetables (Amaranths & Spinach) (Poly house)	50	-	537 kg/100 Sq m	659 Kg/100 Sq m	12%	Through foliar spray @100ml per 10 Liter of water	-
4	Okra (S)	Field RBD 200	3	1.34 t/ha	1.76 t/ha	31%	4 foliar spray @ 1/2% (v/v)	
5	Cluster Bean (S)	----- " ----- ---	3	1.59 t/ha	2.07 t/ha	30%	----- " -----	
6	Cowpea (S)	----- " ----- ---	3	1.39 h/ta	1.67 t/ha	20%	----- " -----	
7	Banana	Field CRD 150	3	81 t/ha	100 t/ha	23%	Cone feeding @ 120 ml/Plant in 3 Splits.	
8	Mango	Field 500	3	6.25 t/ha	8.41 t/ha	34%	3 foliar sprays @1% (v/v)	
9	Wheat	Organic Farm Field (RBD) --> 50	2	2.15 t/ha	2.59 t/ha	16%	3 foliar sprays @1% (v/v)	
10	Paddy	Organic Farm Field (RBD) --> 100	2	3.73 t/ha	4.55 t/ha	14%	3 foliar sprays @1% (v/v)	
11	Chilly	Field (RBD) 250	3	10.34 t/ha	12.76 t/ha	20%	----- " -----	
12	Maize	Field (RBD) 250	3	1.41 t/ha	1.66 t/ha	20%	----- " -----	
13	Cotton	Field (RBD) 300	3	2.1 t/ha	2.36 t/ha	17%	----- " -----	
14	Cereals	Field (RBD) 300	3	-	-	16%	----- " -----	
15	Oilseeds	Field (RBD) 500	3	-	-	18%	----- " -----	