# BioAll

# Nutrient mobilizing liquid Biofertilizer

BioAll has the unique ability to enrich the soil with Nitrogen, Phosphorous and Potash. It efficiently fixes atmospheric nitrogen, solubilizes insoluble and chemically fixed phosphates and has the ability to mobilize and solubilize soil potash and insoluble potash compounds thus making all three of these essential nutrients available to the plant in a ready, available form.

It also enhances the availability of Mn, Mg, Fe, Mo, Bo, Zn and Cu, among others, in the soil. BioAll provides the major nutrients (NPK) to the soil which results in higher yield. BioAll produces certain growth promoting substances such as Thiamine, Indol and Acetic Acid which help impart resistance to the plant from plant pathogens such as Alternaria and Fusarium.

It produces organic acids like Citric, Tartaric, Malic which increase the availability of phosphates in the rhizosphere.



BioAll is a blend of beneficial micro organisms which together fix atmospheric nitrogen, solubilize insoluble and chemically fixed phosphates and mobilize soil potash compounds.

The micro-organisms responsible for the contribution of N to the soil:

- Nitrogen fixation is the most conspicuous physiological characteristic of one of the components of BioAll. The organism has the ability to grow and give the plant a nitrogen source even in the absence of an alternate nitrogen source.
- Plant growth promoting organisms fix N in micro-aerobic and aerobic environments and avoid excessive concentrations of oxygen through high respiration consumption of oxygen by colonizing sites with low partial pressure of oxygen, such as in submerged rice roots.
- They contribute to increased yields of cereal and forage grasses by improving root development in properly colonized roots, increasing the rate of water and mineral uptake from the soil, and by biological nitrogen fixation.

### P solubilizing activity:

- Both inorganic and organic phosphates exist in soil. The inorganic forms are compounds of calcium, iron, aluminium, etc.
- Insoluble inorganic compounds of phosphate are largely unavailable to the plants, but **BioAll** can bring the phosphate into solution.
- It will not only assimilate the element but also make a large portion soluble.

### K mobilizing activity:

- Potassium is an essential major plant nutrient and also a non-renewable resource. It plays a vital role in plant metabolism such as photosynthesis, translocation of photosynthates, regulation of plant pores (stomata), activation of plant catalysts (enzymes) and imparts resistance in plants against pests and diseases.
- Without adequate potassium, the plants will have poorly developed roots, grow slowly, produce small seeds and have lower yields. They are also more susceptible to disease infection. Majority of the soils of the world are too low in available potassium for production of good yields.

The micro-organisms present in BioAll are known to solubilize potassic minerals into soluble form which can be utilized by the plants.

#### Dosage:

#### Soil Preparation:

3 litre per hectare. Applied either through a drip system or mixed with 1 ton of organic manure, preferably leaving a 7 day gap on either side before applying chemical fertilizer or pesticide.

#### Seed Treatment:

5ml to 7ml per kg of seed.

#### Seedling Dipping:

Mix 50ml – 70ml in 15 litres of water & dip the seedling for 10 minutes before transplanting.

#### Tree Treatment:

Dilute and spray @ 600 ml/hectare.

### **Available Packaging:**

250 ml HDPE Bottle

500 ml HDPE Bottle

1 ltr HDPE Bottle

5 ltr Carboy

# **BioAll Result in Tobacco Crop**



# **BioAll Result in Tobacco Crop**



### WITH BIOALL



### WITHOUT BIOALL

# **BioAll Result in Chilli Crop**



### WITH BIOALL



### WITHOUT BIOALL

### Certificate of Analysis

# **BIO All**

### Nutrient mobilizing liquid biofertilizer

Batch No.	:	140748
Date of analysis	:	03/07/2014
Mfg. Date	:	03/07/2014
Expiry Date	:	03/07/2015

Sr. No.	Characteristic	Requirement	Results Obtained
1	Physical State	Liquid	Complies
2	Colour	Pale Yellow	Complies
3	Count	1 x 10 <sup>8</sup> Cell/ml	Complies
4	рН	7.00	Complies
5	Odour	Mild	Complies

**Remark:** The above product complies as per specification.

For Nico Orgo Manures

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**Quality Control Dept.** Microbiologist Partner

### Material Safety Data Sheet NICO ORGO MANURES

Product Name	:	BIO ALL
Produce Code	:	Nitrogen fixer + PSB + Potash mobilizing bacteria
Chemical Formula	:	Mixture
Other Designations	:	Liquid Formulation Containing Agriculturally beneficial microorganisms.

Company :

### NICO ORGO MANURES

No Hazardous Ingredients.

Contains naturally-occurring, non-pathogenic, microorganisms in liquid formulation. This includes Bacillus coagulans popularly used in agriculture for phosphate solubilizing. See Product label for method of application, dosage and recommendations. Not for food, feed or drug use.

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Emergency Overview	: No known health hazards
Primary Entry Routes	: Oral (swallowing), Inhalation
Acute Effects (Signs and Sy	mptoms of Overexposure) :
Eyes	: Liquid may cause mechanical irritation of eyes
Skin	: No known hazard
Inhalation	: Inhalation of large amounts may cause discomfort

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Ingestion : No known hazard
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Chronic Effects	: No known hazard		
Medical Conditions Aggrav	vated by Exposure: None known		
Target Organs	: None		
Carcinogenicity	: None		
HMIS	: Health – 0, Flammability – 0, Reactivity – 0		
*****	* 4. First Aid Measures ************************************		
Eyes : Flush with irritation pe	water for at least 15 minutes. Get medical attention if ersists.		
Skin : Wash with	soap and water		
Inhalation : Remove person to fresh air. Get medical attention if discomfort Persists			
Ingestion : No treatme	ent necessary		
*****	** 5. Fire Fighting Measures ************************************		
Flash Point	: None		
Autoignition Temperature	: Not Applicable		
Explosive Limits	: LEL: Not Applicable		
	UEL: Not Applicable		
Extinguishing Media	: Use media suitable for surrounding fire		
Unusual Fire or Explosive	-		
Fire Fighting Instructions	: No special requirement		
*****	6. Accidental Release Measures ************************************		
Large Spill / Leak Procedu			
Small Spills	: Flush area with water		
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Storage Requirements	: Store in original container in clean, cool and dry place. Use before expiration date printed on package		

Handling Precautions: No special handling requirements. Follow normal hygienic<br/>and housekeeping standards for agricultural products

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Ventilation	: Special ventilation is not required
Protective Clothing / Equipment	: No special requirement
Respirator	: Not required
Contaminated Equipment	: Clean with soap and water
Comments	: Practice general personal hygiene after using this
	product. Wash hands with soap and water before
	eating, drinking or smoking.

Physical State	:	Liquid
Colour	:	Light yellow
Odour	:	Mild
Water Solubility	:	Soluble
% Volatile volume	:	Not determined
Specific Gravity	:	-
Vapour Pressure	:	Not determined
Vapour Density	:	Not determined
рН	:	6.5 – 7.5
Melting Point	:	Not Determined
Boiling Point	:	N.A.
Freezing Point	:	N.A.

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Stability	:	Stable
Conditions to avoid	:	None
Hazardous Polymerization	:	Will not occur
Chemical Incompatibilities	:	Avoid contact with any chemical
Hazardous products of decomposition	:	None

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Eye Effects / Eye Irritation	:	Non-irritating
Acute Oral Effects	:	None
Acute Inhalation Effects	:	None
Acute Dermal Effects	:	None
Skin Irritation	:	Non-irritating
Skin Sensitization	:	Not a skin sensitizer

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The product contains non-pathogenic bacterial strains that occur naturally in soil and is biodegradable.

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Disposal: Small amounts of the product which cannot be used according to the label instructions may be disposed off in a landfill

RCRA Waste Status: This product is not regulated as a hazardous waste. State and local regulation may affect the disposal of this product. Consult your state, local of provincial environmental agency for disposal of waste other than by use according to instructions.

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Transportation Data	: This product is not regulated as a hazardous material for all
	modes of transportation
Hazard Class	: Not Applicable
ID No.	: Not Applicable

TSCA	:	All components of this product are
		listed on TSCA Inventory
SARA Section 313	:	Contains no reportable components
OSHA Hazard Classifica	ation :	Non Hazardous
Proposition 65	:	Contains no components subject to
		Warning requirement

WHMIS / Controlled Products Regulations : This products has been classified in accordance with the hazard criteria of the CPR and this MSDS contains all of the information required by the CPR

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Reactivity: 0Specific Hazard: Not Applicable

Information presented on this Material Safety Data Sheet is believed to be accurate at the time of publication. No warranty, expressed or implied, is made with regard to this information. This information may not be adequate for every application, and the user must determine the suitability of this information due to the manner / conditions of use, storage or local regulations.

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