

WHY “ARABSABIO”

- An efficient tool for Bioremediation process
- Environment friendly
- Organic Way

UNIQUENESS WITH “ARABSABIO” AS CLEANSING MECHANISM

Regular use of “ARABSABIO” results in :

- Reduce BOD (Biochemical oxygen demand)
- Lower COD (Biochemical oxygen demand)
- Increase DO (dissolved oxygen)
- Reduce Total Suspended solids TSS
- Elimination of bad Odor
- Reduce Turbidity
- Lower FOG (Fat, Oil, and Grease)
- Reduce Sludge Volume (Semi solid slurry from refining/Industry)
- Reduce the load of many pathogenic microbes

Many more



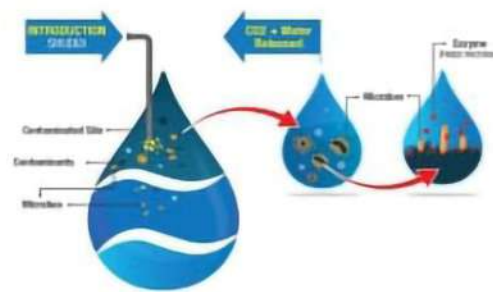
MECHANISM OF ARABSABIO

The microbes **eat up contaminants** such as organic matter, convert them and then let off carbon dioxide and water.

The process uses naturally occurring selected strains of microorganism mainly bacteria to degrade substances that are **hazardous to human health or the environment**

THE CLEANING PROCESS

Arabsabio eat up contaminants such as oil and organic matter. Letting off carbon dioxide and water.



Experimenting With Dirty Water And Various Mixes Of Microbes-to Get A Clue



Arabsabio Extremely good for *In situ* bioremediation
(Involves treating the contaminated material at the site)

Public sewage (Gutter) water sample- Treated in Lab ,
Seen reduced turbidity after 21 day



BENEFITS OF ARABSABIO

FEATURES & BENEFITS

- Safe for human beings, animals & environment
- Readily Biodegradable
- 100% Bio-product
- Free from chemicals
- Shuddhi application helps to reduce epidemics

HOW TO USE “ARABSABIO”

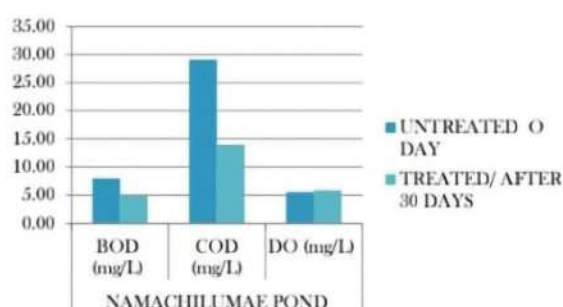
- ▶ Apply **Arabsabio** powder directly to the contaminated site at the rate of 2.5 ml or 5 gm per square meter (m^2) area once in a month or as needed.
- ▶ To treat one cubic meter (1KL) contaminated water source, apply **Arabsabio** @ 250g or 100 ml once in a month or as needed



PUBLIC GARDEN- SMALL POND

parameters	0 DAY	30 DAT
BOD (mg/L)	8.00	5.00
COD (mg/L)	29.10	14.00
DO (mg/L)	5.60	5.90

Application rate- 5g/ Sq. Mt

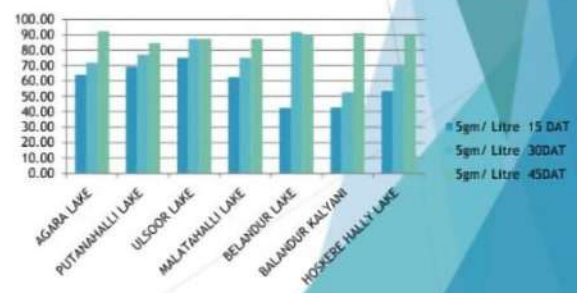
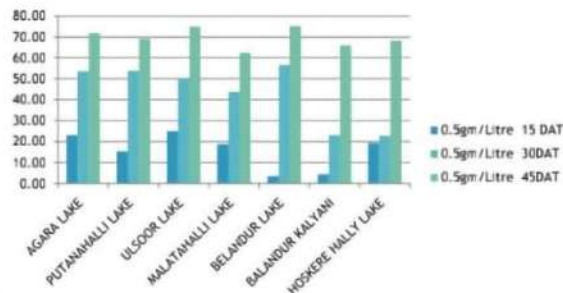


Reduce water turbidity. Smell and Improve /healthy vegetation plus more fish activities

Study result of Major lakes of BANGALORE

% Reduction in BOD @ Different Dosage

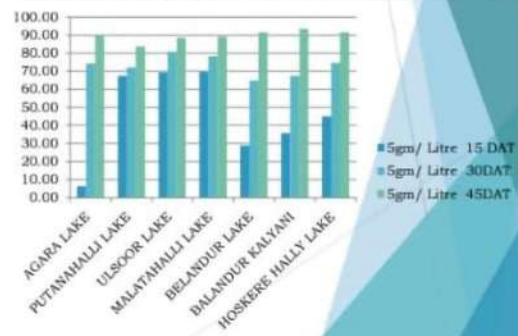
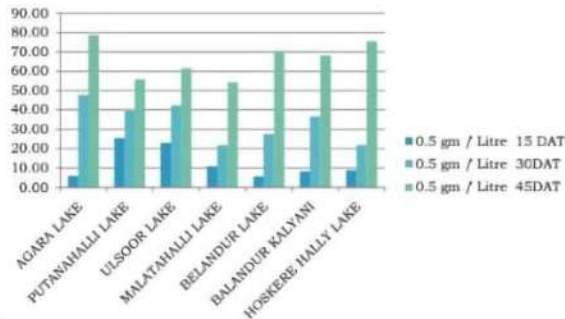
	0.5gm/Litre				5gm/ Litre		
	15 DAT	30DAT	45DAT		15 DAT	30DAT	45DAT
AGARA LAKE	23.08	53.59	71.79	AGARA LAKE	64.10	71.79	92.31
PUTANAHALLI LAKE	15.38	53.85	69.23	PUTANAHALLI LAKE	69.23	76.92	84.62
ULSOOR LAKE	25.00	50.00	75.00	ULSOOR LAKE	75.00	87.50	87.50
MALATAHALLI LAKE	18.75	43.75	62.5	MALATAHALLI LAKE	62.5	75	87.5
BELANDUR LAKE	3.54	56.64	75.22	BELANDUR LAKE	42.48	91.68	90.27
BALANDUR KALYANI	4.40	23.08	65.93	BALANDUR KALYANI	42.86	52.75	91.21
HOSKERE HALLY LAKE	19.32	22.73	68.18	HOSKERE HALLY LAKE	53.44	69.32	89.77



COD values @ different ARABSABIO Dosages

% Reduction in COD

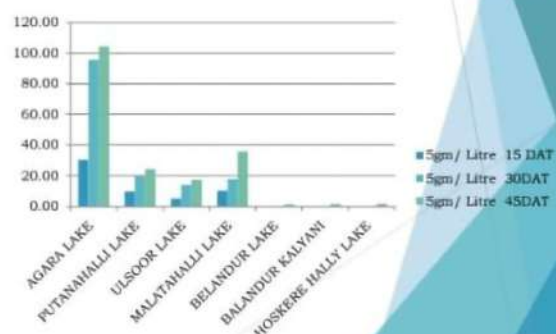
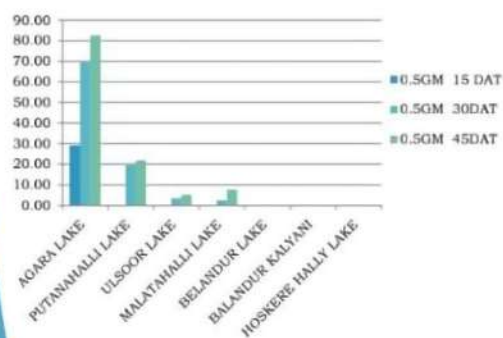
	0.5 gm / Litre				5gm/ Litre		
	15 DAT	30DAT	45DAT		15 DAT	30DAT	45DAT
AGARA LAKE	5.96	47.68	78.81	AGARA LAKE	6.49	74.17	90.07
PUTANAHALLI LAKE	25.58	39.53	55.81	PUTANAHALLI LAKE	67.44	72.09	83.72
ULSOOR LAKE	23.08	42.31	61.54	ULSOOR LAKE	69.23	80.77	88.46
MALATAHALLI LAKE	10.87	21.74	54.35	MALATAHALLI LAKE	69.57	78.26	89.13
BELANDUR LAKE	5.74	27.53	70.55	BELANDUR LAKE	28.87	64.82	91.40
BALANDUR KALYANI	8.30	36.65	68.16	BALANDUR KALYANI	35.75	67.49	93.50
HOSKERE HALLY LAKE	9.00	21.85	75.58	HOSKERE HALLY LAKE	44.99	74.55	91.52



DO values @ different ARABSABIO Dosages

% INCREASE in DO

	0.5GM				5gm/ Litre		
	15 DAT	30DAT	45DAT		15 DAT	30DAT	45DAT
AGARA LAKE	29.09	69.57	82.61	AGARA LAKE	30.43	95.65	104.35
PUTANAHALLI LAKE	0.00	19.51	21.95	PUTANAHALLI LAKE	9.76	19.51	24.39
ULSOOR LAKE	0.00	3.51	5.26	ULSOOR LAKE	5.26	14.04	17.54
MALATAHALLI LAKE	0.00	2.56	7.69	MALATAHALLI LAKE	10.26	17.95	35.90
BELANDUR LAKE	0.00	0.00	0.00	BELANDUR LAKE	0.00	0.00	1.50
BALANDUR KALYANI	0.00	0.00	0.00	BALANDUR KALYANI	0.00	0.00	1.70
HOSKERE HALLY LAKE	0.00	0.00	0.00	HOSKERE HALLY LAKE	0.00	0.00	1.80



ADVANTAGES OF ARABSABIO

- **Cost effective** -The cost of using Arabsabio for the Bioremediation is lower than that of traditional processes both *in situ* and *ex situ*
- **Long Lasting**- Product is continue to work for several days-month period
- Arabsabio can be employed in areas that are **inaccessible**
- Arabsabio is potentially “**the least harmful**” method because it uses naturally occurring organisms and preserves the environment in a more natural state



FREQUENTLY ASKED QUESTIONS

- ▶ **Does inhalation of Arabsabio causes any diseases?**
These are very safe natural microorganisms and does not create any diseases in humans, animals, birds, fishes even plants.
- ▶ **Does direct skin contact result in itching/fungal infection ?**
No, however simple cleaning with water is recommended.
- ▶ **Does it produce methane/ ammonia/ nitrous oxide as a by-product?**
It's an aerobic reaction, produce co2 and water as by-product, its again depend on nature of inputs (source)
- ▶ **What is the lifespan of these microorganisms ?**
Under Normal storage, its shelf life is 12 months. However under dark & well ventilated area product can be stored up to 24 months
- ▶ **Are they genetically engineered ?**
No. These are naturally occurring microbes

Thank you