



DEPARTMENT OF SOIL SCIENCE & AGRICULTURAL CHEMISTRY

College of Agriculture

Orissa University of Agriculture & Technology, Bhubaneswar – 751 003

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Letter No. 715 / SSAC., Dt. 11/9/14

From

Dr. A.K.Pal
Professor & Head

To

The Principal Investigator
BPD, CIFA
Kausalyaganga
Bhubaneswar

Sub: - Analysis report of 2 nos. of Fish Bio-Fert samples supplied by you.

Sir,

I am enclosing herewith the analysis report of 2 nos. of Fish Bio-Fert samples supplied by you.

Sl. No		pH	EC (ds/m)	OC (%)	Total N (%)	Total P (%)	Total K (%)	BS (%)	B (ppm)	Ca (%)	Mg (%)
1	Hydrosylate meal Fish Biofertilizer	4.82	5.07	33.67	2.95	1.98	0.65	1.52	10.4	2.24	1.75
2	Fish Bio Fert	5.03	2.98	31.01	2.56	0.96	1.20	1.51	39.0	1.55	0.07

Yours faithfully


Professor & Head



भाकृअनुप - केन्द्रीय मात्स्यिकी प्रौद्योगिकी संस्थान
ICAR - CENTRAL INSTITUTE OF FISHERIES TECHNOLOGY
सिफ्ट जंक्शन, विल्लिडन आईलंड, मत्स्यपुरी पी.ओ., कोचिन, - 682 029, केरल, भारत।
CIFT Junction, Willingdon Island, Matsyapuri P.O., Cochin, - 682 029, Kerala, India.
(ISO/IEC 17025: 2005 Accredited & ISO 9001: 2008 Certified)



फा.सं 2-104/2015- क्यू ए एम

दिनांक /Date: 21.07.2015

F. No. 2-104/2015-QAM

M/s. Central Institute of Freshwater Aquaculture,
P.O.- Kausalyaganga,
Bhubaneswar -751 002, Odisha

*AOB/C/BB sohu
F+AO:
(cost to parent made be
arranged)*
30/7/2015

महोदया/Sirs,

आपका पत्र सं CIFA/DC/20/2015 दिनांक 07.04.2015 की ओर ध्यान दें। परीक्षण प्रमाण पत्र रिपोर्ट सं 0644 (एन ए बी एल) दिनांक 21.07.2015 संलग्न है

Please refer to your letter No. CIFA/DC/20/2015 dated 07.04.2015 The test certificate/report No.0644 (NABL) dated 21.07.2015 is enclosed herewith.

भवदीय/ Yours faithfully,

[Signature]
अध्यक्ष/Head *21/7/15*

गुणता आश्वासन एवं प्रबंधन प्रभाग
Division of Quality Assurance & Management

Encl: Test certificate (4 pages)



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(Indian Council of Agricultural Research)
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TEST CERTIFICATE

Report No. : 0644 (NABL) Date : 21.07.2015
Issued to : M/s. Central Institute of Freshwater Aquaculture,
P.O.- Kausalyaganga, Bhubaneswar -751 002, Odisha
Customer Ref. No. : CIFA/DC/20/2015 Date : 07.04.2015

PART A: PARTICULARS OF SAMPLE SUBMITTED

- a) Name of sample : (1) CIFA fish planktofert
(2) Fish Biofert
b) Grade/Variety/Type/Size/Class, etc. : 2 samples
c) Declared values, if any : Nil
d) Code No. : Nil
e) Quantity : 1 ltr
f) Mode of packing : In bottle
g) Any other information : Nil
h) Test performing dates : 24.04.2015 - 20.07.2015

PART B: SUPPLEMENTARY INFORMATIONS

- a) Reference to sampling procedure : Sample supplied by the party
b) Supporting documents for the measurements taken and results derived : Nil
c) Deviation from the test methods as prescribed in relevant ISS/Work instructions, if any : Nil
d) Environmental condition of sampling, if any : N.A

PART C: TEST RESULTS

Sl.No.	Test	Test Method	Unit	Result Obtained
	Separate sheet attached			


Head of Division/ Authorized Signatory


Technical Manager


Quality Manager
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Test Report No. 0644 (NABL)

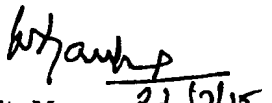
CIFA Fish plankofert

Sl.No.	Test	Test Method	Unit	Result Obtained
1.	Lead	AOAC 2012	ppm	0.1
2.	Cadmium	AOAC 2012	ppm	0.006
3.	Arsenic	AOAC 2012	ppm	Not detected
4.	Chromium	AOAC 2012	ppm	0.47
5.	Nickel	AOAC 2012	ppm	0.25
6.	Copper	AOAC 2012	ppm	0.12
7.	Magnesium	AOAC 2012	ppm	268.1
8.	Manganese	AOAC 2012	ppm	10.72
9.	Iron	AOAC 2012	ppm	121.3
10.	Zinc	AOAC 2012	ppm	17.91
11.	Sodium	AOAC 2012	g%	0.1348
12.	Potassium	AOAC 2012	g%	0.2752
13.	Calcium	AOAC 2012	g%	0.3955
*14.	Mercury	USEPA method 200.7	ppm	0.003
*15.	Cobalt	AOAC 2012	ppm	0.21
*16.	Selenium	AOAC 2012	ppm	0.24
*17.	Aluminium	AOAC 2012	ppm	20.12
*18.	pH	AOAC	-	4.17
*19.	Organochlorine pesticides	APHA 2012	-	Not detected

*Not under NABL scope


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Test Report No.0644 (NABL)

Fish Biofert

Sl.No.	Test	Test Method	Unit	Result Obtained
1.	Lead	AOAC 2012	ppm	1.255
2.	Cadmium	AOAC 2012	ppm	0.123
3.	Arsenic	AOAC 2012	ppm	Not detected
4.	Chromium	AOAC 2012	ppm	21.08
5.	Nickel	AOAC 2012	ppm	7.08
6.	Copper	AOAC 2012	ppm	13.61
7.	Magnesium	AOAC 2012	ppm	1180
8.	Manganese	AOAC 2012	ppm	285.60
9.	Iron	AOAC 2012	ppm	991.8
10.	Zinc	AOAC 2012	ppm	55.79
11.	Sodium	AOAC 2012	g%	0.06
12.	Potassium	AOAC 2012	g%	0.49
13.	Calcium	AOAC 2012	g%	0.51
*14.	Mercury	USEPA Method 200.7	ppm	0.018
*15.	Cobalt	AOAC 2012	ppm	1.11
*16.	Selenium	AOAC 2012	ppm	0.44
*17.	Aluminium	AOAC 2012	ppm	925.4
*18.	pH	AOAC	-	6.78
*19.	Organochlorine pesticides	Gregor Arh, Simona fras, Tomaz Polak, Bozidar Zlender, Marjan Veber & Matevz pompe, "Modification of method for the Determination of organochlorine pesticides in meat samples" Acta Chim.slok 2009, 56, 920-926		Not detected

*Not under NABL scope


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Test Report No. 0644 (NABL)

(1) Fish planktofert		(2) Fish biofert	
Fatty acid	% of FA in terms of total fatty acid	Fatty acid	% of FA in terms of total fatty acid
C6	11.85	C6	2.03
C8	0.92	C8	0.22
C10	0.46	C14	0.61
C14	4.62	C14:1	0.57
C14:1	0.95	C15	0.24
C15:1	0.23	C15:1	0.10
C16	25.33	C16	12.64
C16:1	8.10	C16:1	1.88
C17	1.07	C17	0.34
C17:1	1.08	C17:1	0.10
C18	4.19	C18	16.37
C18:1	22.27	C18:1	23.78
C18:2	8.72	C18:2	22.87
C18:3	3.99	C18:3	3.07
C20	0.47	C20	0.94
C20:3	2.52	C20:1	1.16
C20:4	0.33	C20:2	0.43
C20:5	0.49	C20:3	0.30
C22:6	2.40	C21	0.27
		C20:4	1.94
		C20:5	7.66
		C22:2	0.32
		C23	0.22
		C22:6	1.68
		C24:1	0.24

PART D: REMARKS: Nil

NB: The results stated above relate only to the items tested. This Test Certificate shall not be reproduced except in full without the written approval of the Laboratory.

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