



ಬೆಂಗಳೂರು ಮೆಟ್ರೋ ರೈಲ್ ನಿಗಮ ನಿಯಮಿತ

(ಸಹಭಾಗಿತ್ವದ - ಕರ್ನಾಟಕ ಸರ್ಕಾರ ಹಾಗೂ ಕೇಂದ್ರ ಸರ್ಕಾರ ಉದ್ಯಮ)
ನೋಂದಾಯಿತ ಕಛೇರಿ : ಬಿ.ಎಂ.ಟಿ.ಸಿ. ಕಾಂಪ್ಲೆಕ್ಸ್, 3ನೇ ಮಹಡಿ, ಕೆಂಗಲ್ ಹನುಮಂತಯ್ಯ ರಸ್ತೆ, ಶಾಂತಿನಗರ
ಬೆಂಗಳೂರು - 560 027, ಭಾರತ

Bangalore Metro Rail Corporation Ltd.

(A Joint Venture of Government of Karnataka & Government of India)
Regd. Office : B.M.T.C. Complex, 3rd Floor, K.H. Road, Shanthinagar,
Bangalore - 560 027, INDIA

No. BMRCL/GM/SEMUCP/2023-24/10578

Date: 04.10.2023

To,

Deputy Conservator of Forests
BBMP, Forest Wing,
N.R. Square, Bengaluru, Karnataka 560002

Sub: - Species Breakup List and Soil Report for Compensatory Plantation Plan in lieu of removal of trees between Agara to Ibbalur portal piers LHS/RHS service road area. (ORR-Phase-1 & Phase-3A works). Bengaluru.

Ref: - 1. BMRCL/GM/SEMUCP/2023-24/7991 dated: 19.08.2023

2. Official Memorandum No. DCF/PR260/2023-24 Dated 10.08.2023.

In addition to compensatory plantation plan for 160 saplings plantation submitted on 19.08.2023, soil test report and species break up list are being submitted for your kind perusal.

(Divya S Hosur)
General Manager - SEMU/IT

ಉಪ ಅರಣ್ಯ ಸಂರಕ್ಷಣಾಧಿಕಾರಿ ಕಛೇರಿ
ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ
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List of Tree species for Compensatory Plantation

Location : NPKL

SI NO	Tree Species Name	Category	Quantity
1	Tamarind	Fruit	8
2	Jackfruit	Fruit	8
3	Indian Almond	Fruit	8
4	Indian Fig Tree	Fruit	8
5	Goosseberry Tree	Fruit	8
6	Hole dasavala	Flower	7
7	Hole matti	Wood	8
8	Kadamba mara	Flower & Wood	7
9	Mahogany	Wood	7
10	champaka mara	Flower	7
11	Ala	Wood & Fruit	8
12	Arali mara	Wood & Fruit	8
13	Atti mara	Wood & Fruit	8
14	Basari mara	Wood	7
15	Nerale mara	Fruit	8
16	Neem	Wood	7
17	Honge	Wood	7
18	Tare	Wood	7
19	Red Tamarend	wood	7
20	wild Mango	fruit	10
21	Sihi Hunase	wood	7
Total			160

UNIVERSITY OF AGRICULTURAL SCIENCES GKVK, BANGALORE
DEPARTMENT OF SOIL SCIENCE AND AGRICULTURAL CHEMISTRY

SS&AC/ 504 /2021-22

11-10-2021

To,

✓ SHRI B. C. NATARAJA
 ✓ CHIEF ENGINEER (UG-1), BANGALORE METRO RAIL CORPORATION LTD.,
 BMTC COMPLEX, 3rd FLOOR, K.H. ROAD,
 SHANTINAGAR, BANGALORE- 560 027
 GST NO. 29AAACB4881D1ZQ

Sir,

Sub: Analytical result of two soil samplesreg
 Ref: DR/ STA/TT -169/ 2021-22 dt:-29-09-2021

Please find here with the analytical results of two soil samples provided by you for analysis in the Dept. of Soil Science and Agricultural Chemistry, College of Agriculture, GKVK, Bangalore-65

Soil samples

Parameters	NadaprabhuKempegowda Layout, No. 1 st Sub Division, BDA, Bengaluru	NadaprabhuKempegowda layout, No. 2 nd Sub Division, BDA, Bengaluru
pH (1:2.5)	5.79	6.13
Electrical conductivity (dS/m)(1: 2.5)	0.12	0.19
Organic carbon (%)	0.31	0.36
Nitrogen(kg ha ⁻¹)	238.48	250.61
Phosphorus (kg ha ⁻¹)	31.43	36.37
Potassium(kg ha ⁻¹)	153.50	168.50
Calcium (meq/100 g)	4.50	5.40
Magnesium (meq/100 g)	1.00	1.00
Sulphur (ppm)	16.47	19.82
Iron (ppm)	8.43	10.11
Manganese (ppm)	5.16	6.04
Zinc (ppm)	0.65	0.73
Copper (ppm)	0.27	0.31
Boron (ppm)	0.32	0.39

Inference: The two soil sample provided for analysis are acidic in nature, low organic carbon and available N, medium inP and K as per standards and all other parameters vary from medium to high ranges as per standards. Therefore with proper amendment application soil is suitable for translocation/ compensatory plantation.

The result should not be utilized for legal / commercial purposes without prior consent of the Director of Research.

Forwarded to
 Director of Research

NO DR/STA/TT - 169/2021-22 Yours faithfully

dt: 13/10/21

COUNTERSIGNED

Professor and Head

Director of Research

University of Agricultural Sciences
 Bangalore

UNIVERSITY OF AGRICULTURAL SCIENCES, BANGLORE
DEPARTMENT OF SOIL SCIENCE AND AGRICULTURAL CHEMISTRY
COLLEGE OF AGRICULTURE, GKVK CAMPUS

Soil and Irrigation Water Parameters Interpretation
Limits of Nutrients in Soil / ಮಣ್ಣಿನಲ್ಲಿನ ಪೋಷಕಾಂಶಗಳ ಮಿತಿಗಳು

Parameters				
pH	ರಸಸಾರ	<6.5 ಹಳಿ	6.5-8.5 ತಟಸ್ಥ	>8.5 ಕ್ಷಾರ
EC (dS/m)	ವಿದ್ಯುತ್ ವಾಹಕತ್ವ, ಡೆಸಿಸಿ, ಸೈಮನ/ಮೀ	<0.8 ಸಹಜ ಸ್ಥಿತಿ	0.8-1.6	>1.6-2.5 ಹಾನಿಕಾರಕ

Parameters		Low/ಕಡಿಮೆ	Medium/ಮಧ್ಯಮ	High/ಹೆಚ್ಚು
OC(Organic Carbon%)	ಸಾವಯವ ಇಂಗಾಲ (%)	<0.50	0.5 - 0.75	>0.75
Nitrogen (Kg ha ⁻¹)	ಸಾರಜನಕ (N) ಕೆ.ಜಿ./ಹೆ.	<280	280-560	>560
Phosphorus (Kg ha ⁻¹)	ರಂಜಕ (P ₂ O ₅) ಕೆ.ಜಿ./ಹೆ.	<22.9	22.9-56.33	>56.33
Potassium (Kg ha ⁻¹)	ಪೊಟ್ಯಾಶ್ (K ₂ O) ಕೆ.ಜಿ./ಹೆ.	<141	141-336	>336
Sulphur (ppm)/mg kg ⁻¹	ಗಂಧಕ(S) ಪಿ.ಪಿ.ಎಂ	<10	10-20	>20
Iron (ppm)/mg kg ⁻¹	ಕಬ್ಬಿಣ (Fe) ಪಿ.ಪಿ.ಎಂ	<2.50	2.50-4.50	>4.50
Manganese (ppm)/mg kg ⁻¹	ಮ್ಯಾಂಗನೀಸ್(Mn) ಪಿ.ಪಿ.ಎಂ	<1.00	1.00-2.00	>2.00
Copper (ppm)/mg kg ⁻¹	ತಾಮ್ರ(Cu) ಪಿ.ಪಿ.ಎಂ	<0.10	0.10-0.20	>0.20
Zinc (ppm)/mg kg ⁻¹	ಸತು (Zn) ಪಿ.ಪಿ.ಎಂ	<0.60	0.60-1.00	>1.00
Boron (ppm)/mg kg ⁻¹	ಬೋರಾನ್ (B) ಪಿ.ಪಿ.ಎಂ	<0.25	0.25-0.50	>0.50

Irrigation Water Quality Parameters/ ನೀರಾವರಿ ನೀರಿನ ಗುಣಮಟ್ಟ ನಿರ್ಯತಾಂಕ

Parameter	Low/ಕಡಿಮೆ	Medium/ಮಧ್ಯಮ	High/ಹೆಚ್ಚು
pH ರಸಸಾರ	<6.5	6.5-7.5	>7.5

Salinity Classes

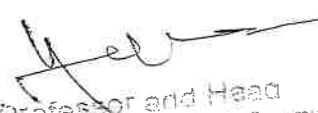
Parameter	Low/ಕಡಿಮೆ (C ₁)	Medium/ಮಧ್ಯಮ (C ₂)	High/ಹೆಚ್ಚು (C ₃)	Very High/ಅತಿ ಹೆಚ್ಚು (C ₄)
EC(dS/M) ವಿದ್ಯುತ್ ವಾಹಕತ್ವ	<0.25	0.25-0.75	0.75-2.25	>2.25
Chlorides(Cl)(ppm)/ಕ್ಲೋರೈಡ್	<2-5	5-12	12-20	>20

Sodicity Classes

Parameter	Low/ ಕಡಿಮೆ (S ₁)	Medium/ಮಧ್ಯಮ (S ₂)	High/ಹೆಚ್ಚು (S ₃)	Very High/ ಅತಿ ಹೆಚ್ಚು (S ₄)
SAR(Sodium adsorption ratio) ಸೋಡಿಯಂ ಹೊರಹೀರುವಿಕೆ ಅನುಪಾತ	<10	10-18	18-26	>26

Bicarbonate (HCO₃) Classes

Parameter	Low (RSC ₁) / ಕಡಿಮೆ	Medium (RSC ₂) / ಮಧ್ಯಮ	High (RSC ₃) / ಹೆಚ್ಚು
RSC(Residual Sodium carbonate) ಉಳಿದ ಸೋಡಿಯಂ ಕಾರ್ಬೋನೇಟ್	<1.25	1.25-2.50	>2.50


Professor and Head
Department of Soil Science and Agricultural Chemistry
College of Agriculture, GKVK Campus