

SOIL SAMPLING
SESSION-2022-2023
By BSc Chemistry
students

**FIVE Students were
assigned fieldwork of
soil sampling :-**

1. Pushkar

2. Vijay

3. Tina Sharma

4. Sanjay

5. Nitin Sharma



Ms. Menon / Mr. Menon

1138
22/12/22

Arjun
22/12/22

प्रेषक

भूमि परीक्षण अधिकारी,
कलानौर।

सेवा में

प्रधानाचार्य,
राजकीय महाविद्यालय,
महम।

क्रमांक : ५९१

दिनांक : 22/12/2022

विषय :

"हर खेत - स्वस्थ खेत" स्कीम के अन्तर्गत मिट्टी के नमूनों का विश्लेषण करने हेतु।

सन्दर्भ :

महानिदेशक, कृषि एवं किसान कल्याण विभाग, हरियाणा, पंचकूला के पत्र क्रमांक 6482-6543/Astt-III(SC) दिनांक 20/12/2022.

उपरोक्त विषय एवं सन्दर्भ के अंतर्गत आपकी सेवा में लिखा जाता है कि आपके महाविद्यालय के विज्ञान के छात्रों द्वारा 1000 मिट्टी के नमूनों का विश्लेषण कार्य करना है। इसलिए 1000 मिट्टी के नमूने गाँव मोखरा खेड़ी के प्रयोगशाला नमूना संख्या 6245-7244 तक आपके महाविद्यालय में भिजवाए जा रहे हैं। आपसे अनुरोध है कि आपके महाविद्यालय के विज्ञान के विद्यार्थियों द्वारा मिट्टी के नमूनों का विश्लेषण कार्य मिनीकट द्वारा करवाने का कष्ट करे। यह आपकी सेवा में सूचनार्थ एवं आगामी आवश्यक कार्यवाही हेतु प्रेषित है।



Arjun 22/12/22
भूमि परीक्षण अधिकारी
कलानौर

From

The Director,
Agriculture & Farmers Welfare Department,
Haryana, Panchkula.

To,

1. The Director General,
Higher Education Department, Shiksha Sadan,
Sector-5, Panchkula.
2. The Director General,
Secondary Education Department, Shiksha Sadan,
Sector- 5, Panchkula.

Memo No.: 6480-81/Asstt.-III (SC) Dated, Panchkula the:- 20/12/2022

Subject: Allotment of soil samples for testing from Soil Testing Laboratories to Government Schools/Colleges-reg.

R/Sir,

Please refer to the subject cited above.

In this regard it is intimated that Hon'ble Chief Minister, Haryana has announced "हर खेत-स्वस्थ खेत" campaign with an aim to collect and test Soil samples from each and every acre of agricultural land of the State and Soil Health Cards (SHCs) be issued to the farmers in the time span of 3-4 years.

The work of collection of Soil samples and distribution of Soil Health Cards will be performed by the science students of GSSS/ Govt. Colleges under "Earn While-You Learn" programme and a remuneration of Rs.40/- will be paid to science students on account of collection and testing of each soil sample. 222 Mini Soil Testing kits have been established in GSSS/ Govt. Colleges till date (List enclosed).

During the current financial year 2022-23, around 30 lakh soil samples have been collected by the Department of A&FW. The pace of collecting of soil samples by the students of GSSS/ Govt. Colleges is very slow. As we are at the end of the 3rd quarter of the Financial Year, the Govt. has decided that minimum 1000 soil samples may be given to each Govt. College for testing of soil samples out of the samples collected by the Department of A&FW, i.e. 30 lakh.

The following points should be taken into consideration for testing of soil samples in Mini Soil Testing kits established in GSSS/ Govt. Colleges:-

1. The Soil Testing Officer (STO) concerned will coordinate with the Principals of Govt. GSSS/Colleges in their respective jurisdiction.

**Various letters from
DGHE, Haryana, and
Soil Testing
Laboratory, Kalanaur
from analysing 1000
samples of soil . Five
students of BSc
Chemistry had done
this project.**

v



प्रेषक

भूमि परीक्षण अधिकारी ,
कलानौर |

सेवा में

प्रधानाचार्या ,
राजकीय महाविद्यालय ,
महम |

क्रमांक : 626

दिनांक : 13/04/2023

विषय : मिट्टी के नमूनों का विश्लेषण करने हेतु मिनीकिट की रिफिलिंग किट देने बारे |
सन्दर्भ : आपके महाविद्यालय के पत्र क्रमांक 1183 दिनांक 17/01/2023 .

उपरोक्त विषय एवं सन्दर्भ के अंतर्गत आपकी सेवा में लिखा जाता है कि आप द्वारा मिट्टी के नमूनों का विश्लेषण मिनीकिट द्वारा कार्य किया जा रहा है | आपके महाविद्यालय द्वारा अब तक 700 मिट्टी के नमूनों का विश्लेषण कार्य पूरा कर दिया गया है | आप द्वारा 300 मिट्टी के नमूनों के विश्लेषण कार्य हेतु मिनीकिट की रिफिलिंग किट की मांग की गयी है | अतः मिट्टी के नमूनों के विश्लेषण कार्य हेतु इस कार्यालय द्वारा आपको 03 Nos मिनीकिट की रिफिलिंग किट भेजी जा रही है ताकि मिट्टी के नमूनों का विश्लेषण कार्य चलता रहे | यह आपकी सेवा में सूचनार्थ एवं आगामी आवश्यक कार्यवाही हेतु प्रेषित है |



Received by
Chemistry Dept.
@kanch
13/04/23

भूमि परीक्षण अधिकारी
कलानौर

प्रेषक भूमि परीक्षण अधिकारी

कलानौर

प्रेषित प्रधानाचार्या,

राजकीय महाविद्यालय, महम

क्रमांक : 258 दिनांक : 08/12/2021

विषय : मृदा परीक्षण कीट देने बारे ।

उपरोक्त विषय के अनुसार आपको लिखा जाता है कि "हर खेत-स्वस्थ खेत" मुहीम के तहत महानिदेशक, कृषि तथा किसान कल्याण विभाग, हरियाणा, पंचकुला के पत्र क्रमांक 5010-5036/Asstt.-III(SC) दिनांक 07/09/2021 (सलंगन) के तहत आपके महाविद्यालय में एक मृदा परीक्षण कीट स्थापित करने के आदेश प्राप्त हुए हैं। अतः आपको एक मृदा परीक्षण कीट Instrument, Glassware & Chemical की लिस्ट सहित आपके महाविद्यालय में दी जा रही है। यह आपको सुचनार्थ एवं आवश्यक कार्यवाही हेतु प्रेषित है।

सलंगन : लिस्ट ।

Muik
भूमि परीक्षण अधिकारी
कलानौर



Taken Over

Muik

Handover

Jan 2

Anu Meher
8/12/2021
Principal,
GOVT. COLLEGE
Mehram (Rohtak)

GOVT. COLLEGE
MEHRAM
ROHTAK

Govt. College Meham had received
1000 samples on 06th Jan 2023 and
completed on 18th April 2023

W/hood
18/04/23

There were four students of BSc
Final who performed the sample.

- | | |
|------------------|---------|
| 1. Pushkar | Pushkar |
| 2. Sanjay Sanjay | Sanjay |
| 3. Vijay | Vijay |
| 4. Nitin Sharma | Nitin |
| 5. Tina Sharma | Tina |

Santosh
20/5/23

W/hood
21/04/23



**Readings of soil
sampling from the
record . Ten nutrients
analyzed (micro and
macro)**



31-60

Exp. No. _____
Date _____

WAVE ANALYTICAL CHEMISTRY

S.No	O.C	Phosphorus	Potassium	Sulphur	Zinc	Iron	Copper	Manganese	Barium	pH	EC
2152	0.0889	0.5	35.2	20.9	4.9	3.6	0.6	0.002	0.007	7.09	0.420
2151	0.0638	0.6	34.4	20.7	4.2	4.2	0.5	0.004	0.007	7.76	0.420
2144	0.0821	0.8	37.4	20.6	7.5	5.4	0.69	0.007	0.005	7.31	0.320
2192	0.0882	0.4	98.6	20.8	6.4	6.9	1.31	0.009	0.003	7.85	0.447
2074	0.0639	1.0	90.2	20.5	10.5	7.2	0.84	0.010	0.004	9.80	0.379
2179	0.0882	1.5	85.2	20.7	12.9	8.5	0.76	0.008	0.002	8.14	0.353
2051	0.0685	2.0	84.6	20.6	5.2	4.2	0.88	0.004	0.004	7.79	0.434
2170	0.0829	0.5	94.4	20.6	6.4	5.4	1.90	0.002	0.005	7.14	0.214
2057	0.0837	0.9	90.2	20.4	5.2	6.5	0.04	0.002	0.006	7.87	0.449
2076	0.0685	1.9	102.5	20.5	6.2	7.2	0.50	0.001	0.007	8.71	0.536
2154	0.0583	3.1	116.9	20.6	8.9	8.2	0.67	0.002	0.008	7.93	0.408
2054	0.0827	3.9	70.5	20.9	10.1	4.6	1.33	0.002	0.009	8.90	0.435
2172	0.0635	2.5	88.9	20.4	12.5	2.9	0.37	0.005	0.001	7.31	0.412
2150	0.0887	2.5	95.1	20.7	6.4	5.0	0.40	0.007	0.010	7.36	0.418
2078	0.0632	2.4	94.0	20.8	7.6	7.5	0.56	0.009	0.011	7.87	0.393
2149	0.0829	3.6	66.0	20.2	8.9	10.4	0.67	0.007	0.005	9.19	0.442
2080	0.0631	2.9	75.0	20.4	10.2	8.6	0.22	0.005	0.001	7.14	0.516
2124	0.0683	3.0	105.0	20.6	22.4	7.2	1.84	0.004	0.004	7.37	0.444
2104	0.0668	3.1	90.0	20.4	16.5	6.4	1.60	0.002	0.001	7.87	0.318
2131	0.0827	3.2	78.0	20.7	12.4	7.4	1.07	0.003	0.002	7.85	0.255
2169	0.0883	1.9	78.4	20.8	12.4	8.2	0.11	0.004	0.004	7.79	0.412
2102	0.0608	2.4	93.4	20.7	11.7	4.2	1.17	0.009	0.009	7.02	0.516
2138	0.0887	2.9	102.9	20.9	10.5	2.5	1.27	0.002	0.004	9.93	0.394
2140	0.0880	2.2	76.2	20.4	9.4	7.4	0.39	0.003	0.001	7.84	0.418
2182	0.063	1.3	86.8	20.5	15.2	3.9	0.53	0.004	0.010	7.76	0.512
2148	0.063	0.8	97.2	20.3	10.5	7.4	1.76	0.002	0.001	7.88	0.416
2011	0.0807	1.9	96.4	20.4	6.0	6.5	0.86	0.004	0.004	7.09	0.516
2162	0.0663	0.5	91.5	20.5	17.4	2.0	0.97	0.005	0.002	7.91	0.320
2133	0.0887	1.3	83.4	20.0	18.6	8.0	0.74	0.005	0.002	7.76	0.414
2050	0.0887	3.2	79.5	20.6	10.2	1.1	0.007	0.007	0.011	7.38	0.496



31-60

S.No	O.C	Phosphorus	Potassium	Sulphur	Zinc	Iron	Copper	Manganese	Boron	pH	EC
2152	0.0889	0.5	352	207.9	4.4	2.6	0.6	0.002	0.007	7.09	0.420
2171	0.06378	0.6	84.4	204.7	4.2	4.2	0.5	0.004	0.007	7.76	0.420
2144	0.0831	1.2	87.4	202.6	7.5	5.4	0.69	0.007	0.005	7.31	0.320
2192	0.0682	0.4	98.6	208.6	6.4	6.9	1.31	0.009	0.003	7.85	0.447
2074	0.0689	1.0	90.2	205.9	10.5	7.2	0.84	0.010	0.004	9.80	0.379
2179	0.0882	1.5	85.2	207.4	12.4	8.5	0.76	0.008	0.002	8.14	0.353
2051	0.0685	2.0	84.6	207.6	5.2	4.2	0.88	0.004	0.004	7.39	0.434
2170	0.0829	0.5	94.4	208.6	6.4	5.4	1.90	0.002	0.005	7.14	0.214
2057	0.0837	0.9	98.2	204.0	5.7	6.5	0.04	0.002	0.006	7.82	0.449
2076	0.0685	1.9	102.5	205.2	6.7	7.2	0.50	0.001	0.007	8.71	0.536
2154	0.0681	3.1	116.9	203.6	8.9	8.2	0.67	0.002	0.008	7.92	0.408
2054	0.0827	2.9	70.5	209.4	10.11	4.6	1.23	0.002	0.009	8.90	0.485
2172	0.0685	2.5	88.9	204.2	12.5	2.9	0.37	0.005	0.001	7.31	0.412
2150	0.0882	2.5	95.1	207.6	6.4	5.0	0.40	0.007	0.010	7.36	0.418
2078	0.0682	2.4	94.0	208.2	7.6	7.5	0.56	0.008	0.011	7.82	0.399
2149	0.0829	3.6	86.0	200.2	8.9	10.4	0.67	0.007	0.005	9.19	0.442
2080	0.0631	2.9	75.0	202.4	10.7	8.6	0.22	0.006	0.001	7.14	0.516
2124	0.0683	3.0	105.0	205.6	22.4	7.2	1.24	0.004	0.001	7.32	0.444
2104	0.0683	3.1	90.0	202.4	16.5	6.4	1.60	0.003	0.001	7.87	0.212
2171	0.0827	3.2	78.0	204.7	17.4	7.4	1.07	0.003	0.002	7.85	0.256
2169	0.0883	1.9	78.4	208.9	10.2	8.2	0.11	0.004	0.004	7.39	0.412
2102	0.0688	2.4	93.4	207.7	14.2	4.2	0.17	0.009	0.009	7.02	0.516
2178	0.0882	2.9	102.9	209.4	10.5	2.5	1.27	0.020	0.004	9.93	0.394
2140	0.0683	2.7	76.2	204.4	23.4	7.4	0.39	0.003	0.001	7.84	0.418
2182	0.063	1.2	85.8	205.2	15.2	2.9	0.58	0.004	0.010	7.76	0.512
2148	0.063	0.8	97.2	203.7	16.5	7.4	1.76	0.006	0.007	7.88	0.416
2011	0.0803	1.9	96.4	204.0	6.0	6.5	0.86	0.004	0.004	7.09	0.516
2162	0.063	0.5	91.5	205.7	17.4	7.2	0.97	0.005	0.002	7.91	0.320
2133	0.0682	1.3	83.4	203.0	18.5	8.0	0.74	0.003	0.012	7.76	0.414
2050	0.0882	3.7	78.5	208.6	10.2	11.4	1.56	0.007	0.001	7.88	0.496



Sl. No.	Cl.	Bauxite	Petroleum	Sulphur	Zinc	Iron	Copper	Manganese	Boron	Fl	EC
2050	0.2635	61.4	0.110	201.62	16.2	17.62	17.59	7.55	4.766	7.23	0.260
2051	0.1635	65.2	0.49	201.57	15.2	17.51	17.68	7.40	4.707	7.45	0.279
2052	0.7236	66.7	0.51	202.99	16.6	17.69	17.70	8.51	4.605	7.53	0.282
2053	0.4221	60.6	0.6	203.52	16.7	16.62	17.69	6.43	4.699	8.01	0.289
2054	0.3211	70.2	0.4	204.61	14.6	15.61	16.68	7.40	4.701	7.92	0.292
2055	0.302	67.4	0.6	202.62	13.2	16.76	17.69	7.80	4.715	7.92	0.292
2056	0.320	68.9	0.7	203.71	13.0	17.31	16.50	6.54	4.602	7.56	0.290
2057	0.2944	76.3	0.5	204.62	18.4	18.21	17.99	6.41	4.509	8.22	0.301
2058	0.4534	65.2	0.4	202.62	13.5	17.52	18.01	7.40	4.601	7.34	0.297
2059	0.3022	67.6	0.9	202.71	14.0	17.91	17.11	7.30	4.678	7.67	0.284
2060	0.3485	66.2	0.3	202.77	15.2	15.52	17.28	7.40	4.782	7.80	0.295
2061	0.3522	68.1	0.4	202.78	16.2	18.24	15.28	6.52	4.689	7.35	0.296
2062	0.6000	84.0	0.5	202.79	16.3	16.72	17.89	6.99	4.748	7.58	0.291
2063	0.3625	65.3	0.6	202.69	16.4	15.62	17.64	7.40	4.688	7.80	0.292
2064	0.3885	64.8	0.4	201.61	16.2	16.32	17.68	5.62	4.588	7.99	0.292
2065	0.3585	62.9	0.3	203.79	17.6	15.62	17.69	5.23	4.691	7.40	0.297
2066	0.3685	65.4	0.5	204.68	14.8	17.65	17.88	7.61	4.799	7.56	0.293
2067	0.3925	66.3	0.6	207.71	15.1	17.01	17.69	7.30	4.598	7.94	0.286
2068	0.3355	63.2	0.4	208.91	15.3	16.94	16.98	7.42	4.658	7.52	0.294
2069	0.362	67.4	0.7	209.22	16.2	16.52	18.50	7.35	4.709	7.70	0.291
2070	0.3333	70.9	0.6	209.69	14.1	16.54	17.69	7.30	4.704	7.76	0.290
2071	0.3862	70.2	0.4	209.72	15.2	15.41	17.39	6.31	4.744	7.84	0.290
2072	0.3862	65.1	0.3	204.32	15.2	17.59	17.68	6.75	4.698	7.86	0.290
2073	0.2462	63.8	0.2	200.69	16.7	16.57	16.62	7.42	4.768	7.36	0.292
2074	0.3862	65.2	0.9	208.71	16.3	17.69	17.68	7.49	4.790	7.94	0.294
2075	0.3665	59.2	0.3	207.61	14.9	15.52	17.68	7.49	4.731	7.45	0.291
2076	0.3625	70.2	0.4	201.61	15.6	19.02	18.99	7.02	4.708	7.36	0.292
2077	0.3865	67.0	0.4	204.72	17.3	20.04	17.60	7.49	4.798	8.51	0.294
2078	0.3625	68.2	0.5	206.73	18.0	15.02	15.70	7.56	4.638	7.21	0.295
2079	0.3385	64.0	0.6	206.69	13.4	14.62	17.51	8.03	4.790	7.07	0.294



996-997

S.No	GL	P	K	S	2n
9977	6.6354	131.6	167.9	104.3	213.2
9978	0.3743	139.1	165.9	100.8	211.2
9975	0.5371	136.5	172.2	107.9	216.9
9975	6.6393	149.6	150.8	106.7	191.3
9979	0.8721	143.0	106.6	138.5	18.5
9974	0.3183	171.2	166.1	131.9	13.2
9972	0.3793	170.7	173.8	139.3	21.8
9978	0.3861	183.6	169.1	130.4	23.6
9966	0.3699	173.8	166.8	136.8	29.2
9979	0.3711	166.7	170.1	133.6	26.8

This has been verified by Soil
Testing Lab and found correct.

N. Sankar
08/07/23

SHRI YOUNG ZEPHYRUS

Page No. 36
Date

Fe	Cu	Mn	B	PH	EC
53.09	11.8	2.08	13.491	7.34	0.31
61.35	13.2	9.29	7.988	7.41	0.422
71.56	17.6	11.56	8.095	7.56	0.637
48.89	19.5	13.78	11.050	7.72	0.432
53.13	21.4	12.31	16.704	7.04	0.48
51.35	23.3	14.26	15.238	7.24	0.521
46.28	24.2	8.23	2.744	7.36	0.326
41.36	28.4	11.31	12.312	8.31	0.382
43.71	26.3	12.84	13.911	7.41	0.411
50.33	21.4	13.11	16.318	7.07	0.793

N. Sankar
19/04/25

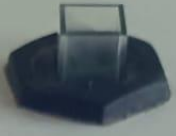


Students carrying out
soil sampling project in
chemistry laboratory





Harvesto



Harvesto

Man9an(mg/kg)
SL.No.405 7.89



DIGITAL SOIL TESTING MINI LAB





Feedback from the students

FEEDBACK ON SOIL SAMPLE TESTING

We, students of Govt. College, Meham pursuing course B.Sc.(III) started the journey of soil testing in the month of January and now, the beautiful journey comes to its end.

We have got to learn about the whole process of soil testing. This includes pH testing, Micro nutrients and macro nutrients present in the soil.

With time, we got to know about the pros of team work . There were a total of 4 students and we used to delegate work everyday.

When we get together in the Lab, we learnt to work with unity and this leads to better rationalization of work.

We used to learn about the testing machine and the principles of soil testing.

Another learning is about the difference between amount of fertilizers used vs the precise amount of fertilizers that should be used.

With the help of this technique there arises a great hope of good farming in future with the help of the data.

While working, we felt like working as a professional personnel.

When we used to get together at the fixed time in the lab, we learnt a lot about discipline. Daily fixed routine and we have to maintain the timings, no. of sample testings etc. anyhow.

We faces some difficulties in preparing the standard solution of Potassium and sulphur but with time, we get used to it and concurred it with our hardwork.



In some situations, we got stuck at some point but at that instance, our incharge Dr. Manisha Hooda Mam supported us.

Overall, this boosts up our self-confidence towards research field.

We would like to thank our teachers and the other concerned staff who helped us a lot in finalizing this project in the limited time frame.

Overall, All Credits to our Principal mam and Respected Staff of our concerned department.



M. Hooda
12/05/23

Sonjay

Ruthhas

Vijay

Nitin