



ज्ञान-विज्ञान विमुक्तये

UNIVERSITY GRANTS COMMISSION
BAHADUR SHAH ZAFAR MARG
NEW DELHI – 110 002

**PROFORMA FOR SUBMISSION OF INFORMATION AT THE TIME
OF SENDING THE FINAL REPORT OF THE WORK DONE ON
THE MAJOR RESEARCH PROJECT ENTITLED**

**“MONITORING OF POLLEN INCIDENCE IN THE ATMOSPHERE OF
HOOGHLY DISTRICT, WEST BENGAL WITH REFERENCE TO
ALLERGIC DISORDERS.”**

File No. 41-444/2012 (SR) Dt. 17 th July,2012

Submitted by

PRINCIPAL INVESTIGATOR : Dr. Jiban Kr.Pal

HOD & Associate Professor in Botany

Department of Botany

Netaji Mahavidyalaya

Arambagh, Hooghly, Pin- 712601

ARAM - NM - 595

Date: 28.06.2016

To
The Under Secretary (FD - III)
University Grants Commission
Bahadur Shah Zafar Marg
New Delhi - 110002

Your Letter No. - F. 41-444/2012(SR) Dated: 16 July, 2015

Subject - Submission of final report of the work done of the project

Respected Sir,

I am submitting the final report of the work done of the Major Research Project entitled, "Monitoring of pollen incidence in the atmosphere of Hooghly district, West Bengal with reference to allergic disorders" (File No. F. 41-444/2012(SR) Dt. 17th July, 2012). This is for your kind information and taking necessary action.

With regards,
Yours faithfully,

Jiban Kumar Pal
28/06/2016

Dr. Jiban Kumar Pal
Principal Investigator
UGC Major Research Project

DR. J.K. PAL
ASSOCIATE PROFESSOR
DEPARTMENT OF BOTANY
NETAJI MAHAVIDYALAYA
ARAMBAGH - 712601

Enclosure:

1. Two hard copy of the Final Report
2. One soft copy (CD Form)

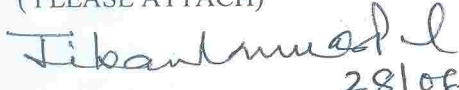
Forwarded
[Signature]
28/06/16
Principal
Netaji Mahavidyalaya
Arambagh, Hooghly

UNIVERSITY GRANTS COMMISSION
BAHADUR SHAH ZAFAR MARG
NEW DELHI- 110002

Annexure- IX

PROFORMA FOR SUBMISSION OF INFORMATION AT THE TIME OF SENDING THE
FINAL REPORT OF THE WORK DONE ON THE PROJECT

1. Title of the Project : MONITORING OF POLLEN INCIDENCE IN THE ATMOSPHERE OF
HOOGHLY DISTRICT, WEST BENGAL WITH REFERENCE TO ALLERGIC DISORDERS
2. NAME AND ADDRESS OF THE PRINCIPAL INVESTIGATOR : Dr. Jiban Kumar Pal
Office –Netaji Mahavidyalaya,P.O.- Arambagh,Dt.Hooghly,PIN–712601, West Bengal, India
Residential–Vivekanandapally, Ward No.13,P.O.-Arambagh,Dt.–Hooghly,Pin– 712601, West
Bengal , India
3. NAME AND ADDRESS OF THE INSTITUTION : Netaji Mahavidyalaya,P.O.– Arambagh Dt –
Hooghly,Pin–712601, West Bengal,India
4. UGC APPROVAL LETTER NO. AND DATE : 41- 444/2012(SR) Dt.17thJuly,2012
5. DATE OF IMPLEMENTATION : 04.09.2012
6. TENURE OF THE PROJECT : 03 Years,01.07.2012 to 31.12.2015(Extended for 6
months by UGC).
7. TOTAL GRANT ALLOCATED : Rs.9,42,000/-
8. TOTAL GRANT RECEIVED : Rs.8,81,880/-
9. FINAL EXPENDITURE : Rs.9,49,275/-
10. TITLE OF THE PROJECT : MONITORING OF POLLEN INCIDENCE IN THE ATMOSPHERE
OF HOOGHLY DISTRICT, WEST BENGAL WITH REFERENCE TO ALLERGIC DISORDERS
- 11.OBJECTIVES OF THE PROJECT : Annexure - A
- 12.WHETHER OBJECTIVES WERE ACHIEVED : Yes (Annexure – B)
(GIVE DETAILS)
- 13.ACHIEVEMENTS FROM THE PROJECT : Annexure - C
14. SUMMARY OF THE FINDINGS : Annexure - D
(IN 500 WORDS)
15. CONTRIBUTION TO THE SOCIETY : Annexure- E
(GIVE DETAILS)
- 16 WHETHER ANY PH.D. ENROLLED/PRODUCED OUT OF THE PROJECT: Yes, Annex-F
17. NO. OF PUBLICATIONS OUT OF THE PROJECT : 04, Annexure- G
(PLEASE ATTACH)


28/06/2016
(PRINCIPAL INVESTIGATOR)

DR. J.K. PAL
ASSOCIATE PROFESSOR
DEPARTMENT OF BOTANY
NETAJI MAHAVIDYALAYA
ARAMBAGH - 712601


28/06/16
(REGISTRAR/PRINCIPAL)

Principal
Netaji Mahavidyalaya
Arambagh, Hooghly

Annexure- A

OBJECTIVES OF THE PROJECT

1. Description of the pollen grains of flowering plants in different seasons of the year.
2. Enumeration of the diagnostic features of the pollen grain of a species.
3. Preparation of the pollen identification key of the flora.
4. Monitoring of pollen incidence in the atmosphere

Annexure- B

WHETHER OBJECTIVES WERE ACHIEVED (GIVE DETAILS)

The objectives of the project were achieved.

Keeping in view of the year wise plan of the work, the field survey of the local flora in different sites (Tirol, Goghat, Khanakul, Chandannagore, Sreerampur, Ballydiwanganj, Kamarpukur, Mayapur and Arambagh town) of the district Hooghly, West Bengal was made for the collection of plant specimens with pollineferous material since September, 2012. The pollineferous material i.e. flowers, flower-buds, anthers of the flowering plants from the respective study sites was collected in different seasons of the year and preserved in FAA (Formalin Acetic Acid) solution. The pollen morphotypes of the collected pollineferous plant material was studied following Acetolysis method. (Erdtman, 1952).

1. Pollen slides of 105 (One hundred five only) plant species were prepared following Acetolysis method. Microphotographs (Figure 1) of pollen grain were taken from the prepared slides.
2. Different pollen morphological parameters such as shape, size, symmetry, apertural pattern and exine configuration was studied. The pollen types and its measurements were determined considering Polar axis (P), Equatorial axis (E), Length of colpa, Diameter of pore, Exine thickness and Exine ornamentation. Diagnostic features of the pollen grains of the investigated plant species was enumerated by Light Microscopy (Table 1).
3. Scanning Electron Microscopic (SEM) study was carried out for the observation of finer structures of pollen grains in detail (Figure 2).

