Introduction

The Division of Plant Pathology is nearly 100 years old. It was originally established in 1905 as Mycology section of Imperial Agricultural Research Institute (IARI) at Pusa, Bihar to initiate mycological and plant pathological research in India. The sectional status was raised to the status of Division of Mycology in 1943-44 after the Institute was shifted to New Delhi. Subsequently, it was named as Division of Mycology and Plant Pathology in 1947-48 and later it was designated as Division of Plant Pathology. Two Regional Stations were established at Pune (Maharashtra) and Kalimpong (West Bengal) in 1956 and 1939 as the nucleus of research on plant viruses.

Detection of pathogens, diagnosis of diseases and ultimately management of disease risks have been the main fabric of Divisional research. The Division has evolved over the years with four major sections, i.e., Mycology, Fungal Pathology, Bacteriology and Virology. Herbarium Cryptogamae Indiae Orientalis (HCIO) and Indian Type Culture Collection (ITCC), Center for Advanced Studies, (CAS) in Plant Pathology and Referrel Center for virus testing of tissue culture raised plants are its "Life Lines". The Division has highly trained scientific, technical and field staff. It has well equipped laboratories to work on diagnosis and characterization of plant pathogens, electron microscopy, cloning of genomes, electrophoresis, sequencing, use of PCR in disease diagnosis, tissue culture, plant transformation etc. The mandates of the Division are

- To conduct basic and applied research leading to detection, identification and management of plant pathogens
- To serve as a Centre for academic excellence in the area of Post-Graduate education in Plant Pathology
- To provide national leadership in plant pathological research through the development of new concepts and technologies

Objective of CAFT:

CAFT in Plant Pathology, Division of Plant Pathology, Indian Agricultural Research Institute envisages imparting advanced training to the scientists and academic staff within the National Agricultural Research and Education System in the country to upgrade their skills in frontier areas of Plant Pathology.
Faculty: Name & Designation (as on 30.09.2011):

<table>
<thead>
<tr>
<th>S.No</th>
<th>Name</th>
<th>Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Dr. R.K. Sharma</td>
<td>Senior Scientist</td>
</tr>
<tr>
<td>2</td>
<td>Dr. (Ms.) T. Prameela Devi</td>
<td>Senior Scientist</td>
</tr>
<tr>
<td>3</td>
<td>Dr. (Ms.) Uma Maheshwari</td>
<td>Senior Scientist</td>
</tr>
<tr>
<td>4</td>
<td>Dr. Deeba kamil</td>
<td>Scientist</td>
</tr>
<tr>
<td>5</td>
<td>Dr. (Ms.) Pratibha Sharma</td>
<td>Principal Scientist</td>
</tr>
<tr>
<td>6</td>
<td>Dr. U.D. Singh</td>
<td>Principal Scientist</td>
</tr>
<tr>
<td>7</td>
<td>Dr. (Ms.) Rashmi Aggarwal</td>
<td>National Fellow/Principal Scientist</td>
</tr>
<tr>
<td>8</td>
<td>Dr. S.C. Dubey</td>
<td>Senior Scientist</td>
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<td>9</td>
<td>Dr. Parimal Sinha</td>
<td>Senior Scientist</td>
</tr>
<tr>
<td>10</td>
<td>Dr. Robin Gogoi</td>
<td>Senior Scientist</td>
</tr>
<tr>
<td>11</td>
<td>Dr. Bishnumaya Bashyal</td>
<td>Scientist</td>
</tr>
<tr>
<td>12</td>
<td>Dr. R.K. Jain</td>
<td>Head</td>
</tr>
<tr>
<td>13</td>
<td>Dr. V.K. Baranwal</td>
<td>Principal Scientist</td>
</tr>
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<td>14</td>
<td>Dr. G.P. Rao</td>
<td>Principal Scientist</td>
</tr>
<tr>
<td>15</td>
<td>Dr. (Ms.) Shelly Praveen</td>
<td>Senior Scientist</td>
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<td>16</td>
<td>Dr. Bikash Mandal</td>
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</tr>
<tr>
<td>17</td>
<td>Dr. Kajal Kumar Biswas</td>
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<tr>
<td>18</td>
<td>Dr. Prachi Sharma</td>
<td>Scientist</td>
</tr>
<tr>
<td>19</td>
<td>Dr. Prabha K</td>
<td>Scientist</td>
</tr>
<tr>
<td>20</td>
<td>Dr. Saritha R.K.</td>
<td>Scientist</td>
</tr>
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</table>

Department: Mycology

Fungal Pathology

<table>
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<tr>
<th>S.No</th>
<th>Name</th>
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<tbody>
<tr>
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<td>9</td>
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<td>Senior Scientist</td>
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<tr>
<td>10</td>
<td>Dr. Robin Gogoi</td>
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<td>11</td>
<td>Dr. Bishnumaya Bashyal</td>
<td>Scientist</td>
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Department: Virology

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<td>Dr. V.K. Baranwal</td>
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<td>Dr. G.P. Rao</td>
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<td>15</td>
<td>Dr. (Ms.) Shelly Praveen</td>
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<td>16</td>
<td>Dr. Bikash Mandal</td>
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<td>17</td>
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<tr>
<td>18</td>
<td>Dr. Prachi Sharma</td>
<td>Scientist</td>
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<tr>
<td>19</td>
<td>Dr. Prabha K</td>
<td>Scientist</td>
</tr>
<tr>
<td>20</td>
<td>Dr. Saritha R.K.</td>
<td>Scientist</td>
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Department: Bacteriology

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<td>Dr. A. Kumar</td>
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<td>22</td>
<td>Dr. Dinesh Singh</td>
<td>Senior Scientist</td>
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<tr>
<td>23</td>
<td>Dr. Kalyan Kr. Mondal</td>
<td>Senior Scientist</td>
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Human Resource Development:
Particulars of Short Courses / Training program for HRD conducted during XI plan period

<table>
<thead>
<tr>
<th>Year</th>
<th>No.</th>
<th>Topic</th>
<th>No. of trainee(s)</th>
<th>No. of participants</th>
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<td>Detection of bacterial plant pathogens: Symptamatology to advanced techniques</td>
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<td>2008-</td>
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<td>Biodiversity, taxonomy, conservation and characterization of fungi</td>
<td>17</td>
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<td>2009</td>
<td>2</td>
<td>Molecular diagnostics of fastidious prokaryotes, viruses and viroids</td>
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<td>2010-</td>
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<td>Viral genomics and transgenic development</td>
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<td>Pathogenomics and diagnostics-cloning and development</td>
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sequencing and bioinformatics of genomic regions of plant pathogens and developing diagnostics 15 - 15

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<th>Year</th>
<th>Works and Renovation</th>
<th>Equipment</th>
<th>Strengthening of Library (Rs)</th>
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<td>48,887</td>
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Awards/Recognitions:

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<tr>
<td>2007</td>
<td>R.K. Jain</td>
<td>Fellow, Indian Virological Society</td>
<td>IVS, New Delhi</td>
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<td></td>
<td>V.G.Malathi</td>
<td>Khwarizmi International Award</td>
<td>Iran Govt.</td>
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<td>2008</td>
<td>K.K. Mandal</td>
<td>Prof. M.K. Patel Memorial Award</td>
<td>IPS, New Delhi</td>
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<td></td>
<td>Robin Gogoi</td>
<td>Dr. H.C. Dubey Outstanding Scientist Award</td>
<td>Indian Society of Mycology and Plant Pathology</td>
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<td>2009</td>
<td>V.G. Malathi</td>
<td>Best Woman Agrl. Scientist Award</td>
<td>ICAR</td>
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<td>R.K. Jain</td>
<td>President, IPS</td>
<td>IPS, New Delhi</td>
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<td>2011</td>
<td>R.K. Jain</td>
<td>VASVIK Award - 2007</td>
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Publications:

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<td>8</td>
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<td>2009-10</td>
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<td>2010-11</td>
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Infrastructure development (equipments etc.):


**PUBLICATIONS (2009-10)**


44. Sharma, Pratibha Sulekh Chandra Deepali Jain, and Amit Kumar Sharma (2009) Coordination Modes of a Schiff Base Pentadentate Derivative of 4-Aminoantipyrine with Cobalt (II), Nickel (II) and Copper (II) Metal Ions: Synthesis, Spectroscopic and Antimicrobial Studies. Molecules. 1-17


54. Sharma, Pratibha and Susanta Banika (2009) Variability in cauliflower stalk rot pathogen Sclerotinia sclerotiorum Indian Phytopathology 62 (3) 279-284


**PUBLICATIONS (2010-11)**


42. Mandal, B and Jain, RK. 2010. ELISA kit for tospovirus detection. ICAR News 16(3):13


**Financial Statement**

**Expenditure under CAFT during XI plan**

<table>
<thead>
<tr>
<th>Head</th>
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<th>2008-09</th>
<th>2009-10</th>
<th>2010-11</th>
<th>2011-12 (As on 10-10-2011)</th>
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<tbody>
<tr>
<td>Operating cost of Training</td>
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<td>4,60,337.00</td>
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<td>86,891.00</td>
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<td>Non-Recurring Contingency T.A.</td>
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<td>3,801.00</td>
<td>20,000.00</td>
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<tr>
<td>Library</td>
<td>48,887.00</td>
<td>38,696.00</td>
<td>11,895.00</td>
<td>6,100.00</td>
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<td>5,68,241.00</td>
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<td>1,18,786.00</td>
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*Unspent balance refunded and deposited in the account