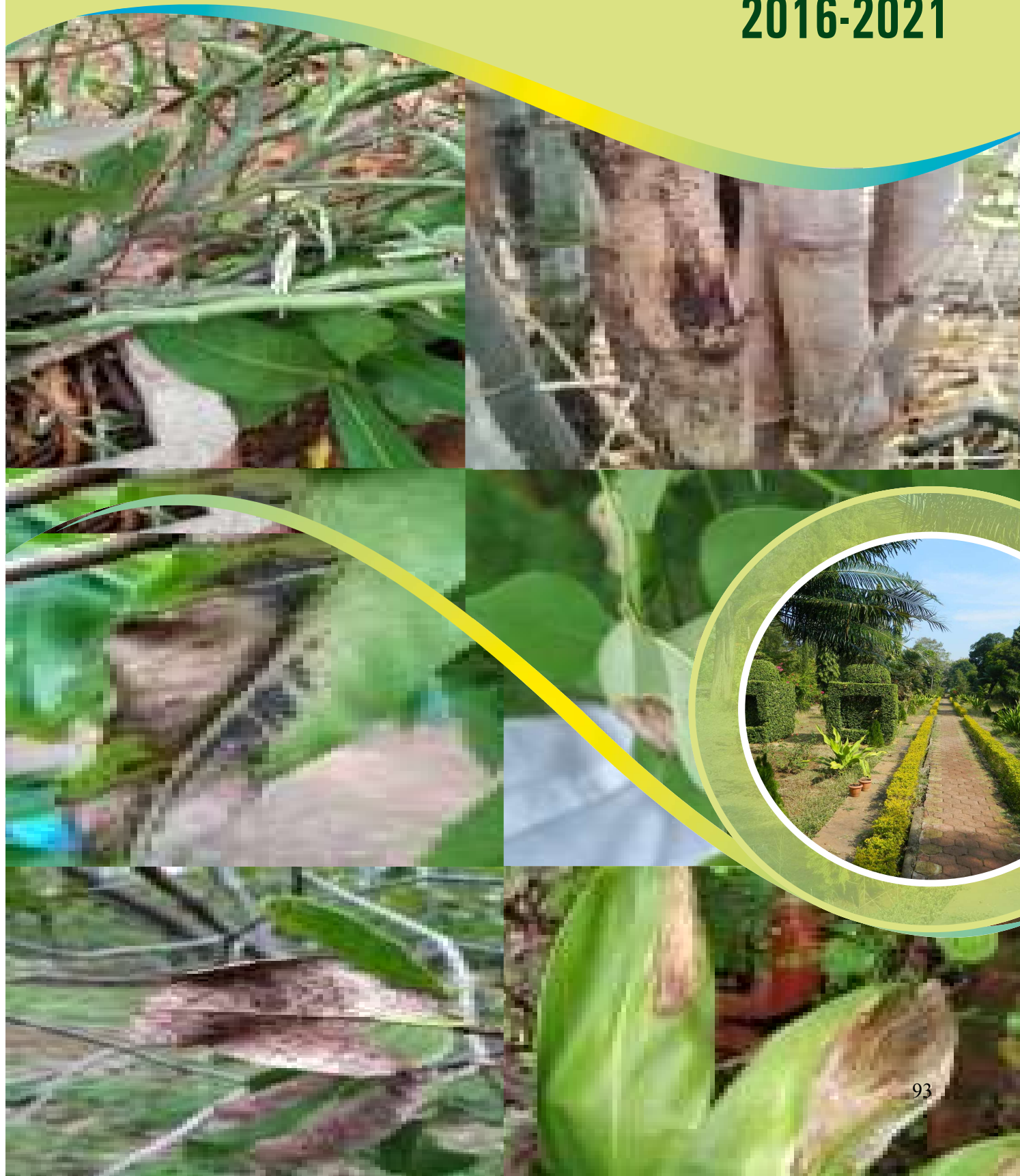


CHAPTER-5

PHYTOPATHOLOGICAL ASSESSMENT

2016-2021





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PHYTOPATHOLOGICAL ASSESSMENT

The university campus is surrounded by dry deciduous forest over the years research carried out by prof. A. N. Rai and his groups enumerate large number of fungi who pathovised the plants specially leaves. The concepts in phytopathology continue to emerge, such as the evolution of the concept of pathological intensity versus the well established concept of disease intensity. The efficient application of any integrated disease management program requires accurate and precise information concerning the qualitative measurement of the disease and/or pathogen population, yet the accuracy and precision of qualitative disease/pathogen assessments in plants. The present information is taken into account for an assessment of phyto- pathogen that infects the plants of the campus. This information helps to assess present phytopathological environment condition. Therefore, it is incorporated under theme of green audit. The present information suggest that what type of plant species is susceptible for infection, whether severity of infection may cause any harm for the present vegetation during the study some new genera/species were discovered.

Table-23: Phytopathological assessment of the campus and adjoining area of the university

S. No.	Host Family	Host Name	Fungus Name
1.	Arecaceae	<i>Phoenix dactylifera L.</i>	<i>Graphiola sp.</i>
2.	Fabaceae	<i>Pisum sp.</i>	<i>Alternaria sp.</i>
3.	Menispermaceae	<i>Cocculus hirsutus (L.) Diels</i>	Powdery mildew
4.	Fabaceae	<i>Albizia lebbek (L.) Benth</i>	<i>Ravenelia sp.</i>
5.	Moraceae	<i>Ficus benghalensis L.</i>	<i>Septoria sp.</i>
6.	Euphorbiaceae.	<i>Euphorbia trigona Mill.</i>	<i>Chuppia sp., Periconia sp.</i>
7.	Vitaceae	<i>Cissus quadrangularis L</i>	<i>Asterina sp.</i>
8.	Euphorbiaceae	<i>Euphorbia geniculata L.</i>	<i>Cladosporium sp. Colletotrichum sp.</i>
9.	Asparagaceae	<i>Dracaena terniflora Roxb.</i>	<i>Asterina sp.</i>
10.	Rubiaceae	<i>Ixora sp.</i>	<i>Asterina sp.</i>
11.	Poaceae	<i>Dendrocalamus strictus (Roxb.) Nees</i>	<i>Ascochyta sp.</i>
12.	Rutaceae	<i>Citrus sp.</i>	<i>Cladosporium sp.</i>
13.	Rutaceae	<i>Limonia acidissima L.</i>	<i>Diplodia sp.</i>
14.	Euphorbiaceae	<i>Pedilanthus tithymaloides (L.) Poit.</i>	<i>Asterina sp.</i>
15.	Poaceae	<i>Dendrocalamus strictus (Roxb.) Nees</i>	<i>Colletotrichum sp.</i>
16.	Euphorbiaceae	<i>Ricinus communis L.</i>	<i>Alternaria sp.</i>
17.	Fabaceae	<i>Saraca indica L.</i>	<i>Diplodia sp.</i>



18.	Fabaceae	<i>Dalbergia sissoo</i> Roxb.	<i>Diplodia</i> sp.
19.	Rubiaceae	<i>Ixora</i> sp.	<i>Cladosporium</i> sp.
20.	Euphorbiaceae.	<i>Euphorbia trigona</i> Mill.	<i>Pestalotiopsis</i> sp.
21.	Moraceae	<i>Ficus elastica</i> Roxb. ex Hornem.	<i>Alternaria</i> sp., <i>Cladosporium</i> sp.
22.	Oleaceae	<i>Nyctanthes arbor-tristis</i> L.	<i>Alternaria</i> sp., <i>Cercospora</i> sp.
23.	Anacardiaceae	<i>Anacardium</i> sp.	<i>Alternaria</i> sp.
24.	Fabaceae	<i>Cajanus cajan</i> (L.) Millsp.	<i>Colletotrichum</i> sp., <i>Torula</i> sp.
25.	Amoryllidaceae	<i>Crinum latifolium</i> L.	<i>Alternaria</i> sp., <i>Cladosporium</i> sp., <i>Periconia</i> sp., <i>Phoma</i> sp.
26.	Bignoniaceae	<i>Millingtonia hortensis</i> L.f.	<i>Alternaria</i> sp., <i>Cladosporium</i> sp., <i>Torula</i> sp.
27.	Myrtaceae	<i>Eucalyptus alba</i> Reinw. ex Blume	<i>Cylindrocladium</i> sp., <i>Gyothrix</i> sp.
28.	Acanthaceae	<i>Barleria</i> sp.	Rust
29.	Asteraceae	<i>Lagascea mollis</i> Cav.	Rust
30.	Fabaceae	<i>Cassia tora</i> (L.) Roxb.	<i>Cladosporium</i> sp.
31.	Cactaceae	<i>Opuntia ficus-indica</i> (L.) Mill.	<i>Periconia</i> sp., <i>Septoria</i> sp.
32.	Euphorbiaceae	<i>Poinsettia</i> sp.	<i>Asterina</i> sp., <i>Coelomycetes</i>
33.	Verbenaceae	<i>Tectona grandis</i> L.f.	<i>Uncinula</i> sp.
34.	Fabaceae	<i>Butea monosperma</i> (Lam.) Taub.	<i>Asterina</i> sp., <i>Cladosporium</i> sp. sp.
35.	Fabaceae	<i>Butea monosperma</i> (Lam.) Taub.	<i>Acremoniula</i>
36.	Lamiaceae	<i>Ocimum sanctum</i> L.	Powdery mildew
37.	Bignoniaceae	<i>Kigelia Africana</i> (Lam.) Benth.	<i>Gyothrix</i> sp.
38.	Verbenaceae	<i>Lantana camara</i> L.	<i>Aposporella</i> sp.
39.	Fabaceae	<i>Dalbergia sissoo</i> Roxb.	Powdery mildew
40.	Fabaceae	<i>Gliricidia sepium</i> (Jacq.) Walp.	<i>Asterina</i> sp. , <i>Cladosporium</i> sp.
41.	Annonaceae	<i>Annona squamosa</i> L.	<i>Cladosporium</i> sp.
42.	Poaceae	<i>Dendrocalamus strictus</i> (Roxb.) Nees	<i>Cladosporium</i> sp.
43.	Fabaceae	<i>Pongamia pinnata</i> (L.) Pierre	<i>Ravenelia</i> sp.
44.	Ebenaceae	<i>Diospyros melanoxylon</i> Roxb.	<i>Phoma</i> sp.
45.	Fabaceae	<i>Acatia catechu</i> (L.f.) Wild.	<i>Didymella</i> sp.
46.	Asteraceae	<i>Parthenium hysteriphorus</i> L.	<i>Alternaria</i> sp.
47.	Asteraceae	<i>Xanthium strumarium</i> L.	<i>Cladosporium</i> sp., Powdery mildews
48.	Euphorbiaceae	<i>Euphorbia hirta</i> L.	Powdery midews
49.	Meliaceae	<i>Azadirachta indica</i> A.Juss.	<i>Cladosporium</i> sp. <i>Pseudocercospora</i>
50.	Poaceae	<i>Cymbopogon citrates</i> (DC.) Stapf	<i>Dictyoarthrinium</i> sp.



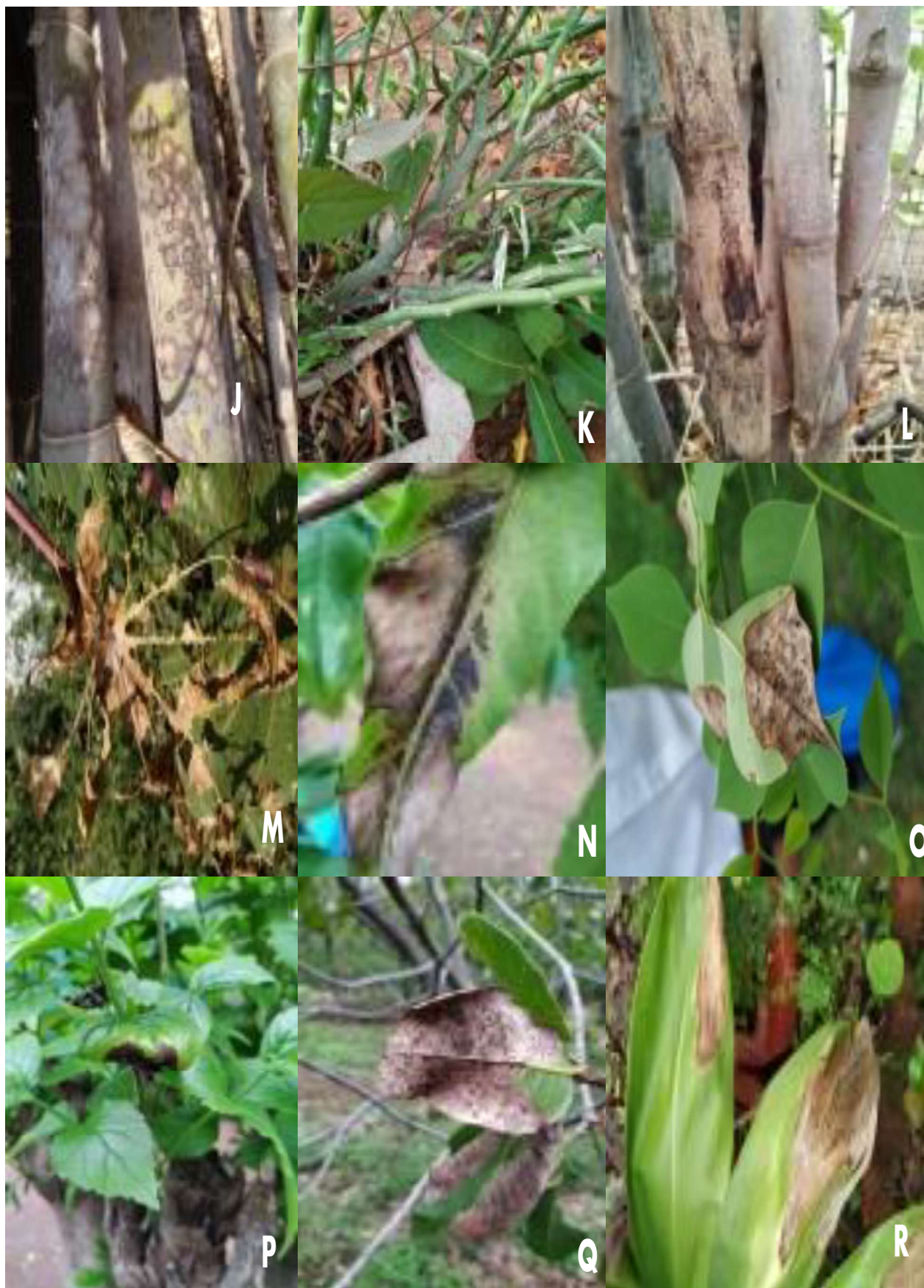






Figure 4 : A- *Phoenix dactylifera* (Pathogen- *Graphiola* sp.); B- *Pisum* sp.(Pathogen- *Alternaria* sp.); C- *Cocculus hirsutus* (Symptom- Powdery mildew); D- *Albizia lebbeck* (Pathogen- *Ravenelia* sp.); E- *Ficus benghalensis* (Pathogen- *Septoria* sp.); F- *Euphorbia trigona* (Pathogen- *Chuppia* sp., *Periconia* sp); G- *Euphorbia geniculata* (Pathogen- *Cladosporium* sp.); H- *Dracaena terniflora* (Pathogen- *Asterina* sp.); I- *Ixora* sp.(Pathogen- *Asterina* sp); J- *Dendrocalamus strictus* (Pathogen- *Ascochyta* sp.); K- *Pedilanthus tithymaloides* (Pathogen- *Asterina* sp.); L- *Dendrocalamus strictus* (Pathogen- *Colletotrichum* sp.); M- *Ricinus communis* (Pathogen- *Alternaria* sp.); N- *Saraca indica* (Pathogen- *Diplodia* sp.); O- *Dalbergia sissoo*(Pathogen- *Diplodia* sp.); P- *Nyctanthes arbor-tristis* (Pathogen- *Cercospora* sp.); Q- *Anacardium* sp.(Pathogen- *Alternaria* sp.); R- *Crinum latifolium* (Pathogen- *Phoma* sp.); S- *Eucalyptus alba* (Pathogen- *Gyothyrix* sp.); T- *Barleria* sp.(Pathogen-Rust Fungi);U- *Cassia tora* (Pathogen- *Cladosporium* sp.);V- *Tectona grandis* (Pathogen- *Uncinula* sp.); W- *Ocimum sanctum* (Pathogen- Powdery mildew Fungi); X- *Lantana camara* (*Aposporella* sp.);Y- *Dalbergia sissoo* (Pathogen- Powdery mildew Fungi); Z- *Annona squamosa* (Pathogen- *Cladosporium* sp.); AB- *Dendrocalamus strictus* (Pathogen- *Cladosporium* sp.); AC- *Pongamia pinnata* (Pathogen- *Ravenelia* sp.); AD- *Xanthium strumarium* (Pathogen- *Cladosporium* sp); AE- *Cymbopogon citrates*(Pathogen- *Dictyoarthrinium* sp.); AF- *Euphorbia hirta* (Pathogen- Powdery mildews Fungi).