

CENTER FOR MICROBIOLOGY AND BIO-TECHNOLOGY
RESEARCH & TRAINING INSTITUTE

An Org. of Science Tech Educational Society, Bhopal. (M.P.)
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The main aim of CMBT is to provide the facility of biosynthesized and chemically synthesized plant crude for Research and discoveries in the all field of science which is going on in different herbal drug formulation and plant secondary metabolites in different research laboratory and Worldwide. By this provide crude drug, biosynthesized plant growth hormones, phytochemical screening facility and antioxidant activity tools for research scholars, scientist and academician.

➤ **Crude Extract of medicinal plant by soxhletion/maceration/peculation using polar and non polar solvents.**

We provide medicinal plant crude extract is as below:

1. Adusa Leaf (*Adhatoda vasica*)
2. Anantmool Root (*Hemidesmus indicus*)
3. Aonla Fruit (*Embllica officinalis*)
4. Apamarg whole plant (*Achyranthes aspera*)
5. Arjun bark (*Terminalia arjuna*)
6. Ashok Bark (*Saraca asoca*)
7. Ashwagandha Root (*Withania somnifera*)
8. Bael Fruit pulp (*Aegle marmelos*)
9. Baheda Fruit (*Terminalia bellerica*)
10. Bavchi seed (*Psoralea corylifolia*)
11. Bhringraj whole plant (*Eclipta alba*)
12. Bhuin Aonla whole plant (*Phyllanthus amarus*)
13. Chandrashoor seed (*Lepidium sativum*)
14. Chitrakmool roots (*Plumbago zeylanica*)
15. Daru Haldi Stem (*Berberis aristata*)
16. Devdaru Stem (*Cedrus deodara*)
17. Giloe Stem (*Tinospora cardifolia*)
18. Gokharu fruit (*Tribulus terrestris*)
19. Gorakhmundi fruit (*Sphaeranthus indicus*)
20. Gudmar Leaf (*Gymnema sylvestre*)
21. Rose flower petals (*Rosa centifolia*)
22. Gular bark (*Ficus glomerata*)
23. Harad Fruit (*Terminalia chebula*)
24. Haarsingar patti (*Nyctanthes arbortristis*)

25. Indrajau fruit (*Holarrhena antidysenterica*)
26. Jamun seeds (*Syzygium cumini*)
27. Jatamansi Rhizome (*Nardostachys jatamansi*)
28. Kababchini Fruit (*Piper cubeba*)
29. Kaifal bark (*Myrica nagi*)
30. Kali Mirch fruits (*Piper nigrum*)
31. Kali musali tubers (*Curculigo orchioides*)
32. Kalmegh whole plant (*Andrographis paniculata*)
33. Karanj bark (*Pongamia pinnata*)
34. Katsariya whole plant (*Barleria prionitis*)
35. Katsariya whole plant (*Barleria prionitis*)
36. Khareti whole plant (*Sida acuta*)
37. Kiwach seeds (*Mucuna pruriens*)
38. Kuda bark (*Holarrhena antidysenterica*)
39. Kutki rhizome (*Picrorrhiza kurroa*)
40. Mahaneem bark (*Ailanthus excels*)
41. Maju Fruit (*Quercus infectoria*)
42. Makoy whole plant (*Solanum nigrum*)
43. Manjishth root (*Rubia cordifolia*)
44. Mulaithi Root (*Glycyrrhiza glabra*)
45. Nagkeshar Flower bud (*Mesua ferrea*)
46. Nagarmotha root (*Cyperus scariosus*)
47. Neem Leaves (*Azadirachta indica*)
48. Nirgundi Leaf (*Vitex negundo*)
49. Pashan-bhed roots (*Bergenia ligulata*)
50. Pathani Lodhra bark (*Symplocos racemosa*)
51. Pippli fruits (*Piper longum*)
52. Pippemool Root (*Piper longum*)
53. Poaad seeds(*Cassia tora*)
54. Punarnava root (*Boerhaavia diffusa*)
55. Rasna Leaf (*Pluchea lanceolata*)
56. Safed Musli Root (*Chlorophytum borivilianum*)
57. Sanay Leaf (*Cassia angustifolia*)
58. Sarpagandha roots (*Rauwolfia serpentina*)
59. Sarponkha whole plant (*Tephrosia purpurea*)
60. Saunth rhizome (*Zingibar officinale*)
61. Shatawar Root (*Asparagus racemosus*)
62. Shilajeet
63. Tulsi Leaf (*Ocimum sanctum*)
64. Vach Root (*Acorus calamus*)
65. Vaividang seed (*Embelia tsjerium-cottam*)
66. Vidarikand roots (*Pueraria tuberosa*)
67. Vidhara Root (*Argyreia speciosa*)

Facility for Phytochemical Screening:

S. No.	Test	Observation
1.	Test for carbohydrate	
	Test for non-reducing polysaccharides (starch)	
2.	Test for protein	
a.	Biuret test	
b.	Millions test	
c.	Xanthoprotein test	
d.	Test for protein containing sulphur	
3.	Test for glycosides	
4.	Test for Flavonoids	
5.	Test for alkaloids	
6.	Test for Tannic and phenolic compound	
7.	Test for organic acid	
a.	Test for Oxalic acid	
b.	Test for Malic acid	
8.	Test for inorganic acid	
a.	Test for Sulphate	
b.	Test for chloride	
c.	Test for Carbonate	
d.	Test for nitrate	
9.	Test for Coumarins Glycosides	

Facility for Qualitative and Quantitative Screening of plant crude and there antioxidant scavenging assay is as below:

- Preliminary Phytochemical analysis
- Total Phenolic Contant assay
- Total Flavanoid assay
- Antioxidant screening:
 1. Total Antioxidant Capacity assay
 2. DPPH assay
 3. Nitrus Oxide Scavevenging assay
 4. Total Tannin Contant assay
 5. Reducing Power assay
 6. FRAP assay
 7. Hydroxyl Radical Scavenging assay
 8. Super Oxide Radical Scavenging assay
 9. Hydrogen Peroxide Radical Scavenging assay
 10. Nitric Oxide Radical Scavenging assay

➤ **Antimicrobial Screening:**

CMBT provide the facility for Antimicrobial activity of crude extract standard Antibiotics against ATCC and MTCC culture

1. Disc diffusion method
2. Well diffusion method
3. Serial dilution method

➤ **Microbiological Screening**

1. Total CFU count
2. Total Bacterial Count

CMBT also provide the facility of Quality Control of Food according to BIS and FSSI standard manual and Quality Control of Ayurvedic Medicine according to IPA standard manual.