ALBUGO

EXERCISE

1. The diseases produced by Albuogo on the crucifers is
(1) Rust (2) White-rust
(3) Red rust (4) Black rust

2. The mycelium of the albugo is
(1) Inter cellular, septate
(2) Intracellular aseptare
(3) Intra cellular, septate
(4) Intercellular, aspetate

3. From one crop to next another ; the infection of Alubo reaches in the form of
(1) Conidida (2) Mycelium
(3) Oospore (4) Zoospore

4. The male gamete in albugo reaches to the female gamete by
(1) Flagella (2) Fertilization tube
(3) Swimming (4) Chemotaxis

5. Which of the following sets of conditions favour rapid spread of white rust disease
(1) High temperature + High humidity
(2) Low temperature + High Humidity
(3) High temperature + Low humidity
(4) Low temperature + Low humidity

6. ***Albugo bliti*** attacks on
(1) ***Sonchus*** (2) ***Portulaca***
(3) ***Amaranthus*** (4) Sweet potato

7. Haustoria of albugo are
(1) Sessile (2) Stalked
(3) Appendiculate (4) Biramous

8. Sexual reproduction in Albugo produced which type of symptoms on host plant
(1) Hypertrophy & deformation
(2) Raised white spots
(3) Phylloidy
(4) All the above

9. After fertilization **coenocentrum** in albugo
(1) Persists (2) Grows in size
(3) Grows in number (4) Disappears

10. Haustoria of Albugo is
(1) Club shaped (2) Butoon shaped
(3) Palmate (4) Pinnate

11. Which of the following species of albugo contain more than one oospherre in oogonium
(1) **A.candida**
(2) **A.bliti**
(3) **A.occidentale**
(4) All the above

12. Viruses re similar to albugo in
(1) being obligate paraside
(2) Having DNA as genetic material
(3) Being Coenocytic
(4) All the above

13. Resting oospore of **A.candida** contains
(1) 100-nuclei (2) 64-nuclei
(3) 32-nuclei (4) One nucleus

14. Which of the following is the source of primary infection by Albugo cadida
(1) Soil born oospores
(2) Conidia born on **Cleome viscosa**
(3) Conidia born on crop host
(4) 1 and 2 both

15. Albugo is
(1) Intercellular, oligate parasite
(2) Intracellular, obligate parasite
(3) Intercellular, facultative parasite
(4) Intercellular, facultative saprophyte

16. Which stain and mouth are generally used for fungi
(1) Cotton blue and glycering
(2) Saffranine and glycerine
(3) Cotton blue and Lactophenol
(4) Eosine & Lactophenon

17. Conidia of **Albugo-candidia** collected from mustard are not infective to radish leaves because
(1) thick cuticle on radish leaves
(2) Radish leaves secrete antibiotics
(3) Biological specialization in Algubo-candida
(4) Biological specialization in radish

18. Study of secondary infection is called
(1) Etiology (2) Ecology
(3) Epidermiology (4) Pathology

19. Bordeaux mixture is first fungicide, is discovered by

(1) Millardet (2) De-berry

(3) Mitchelli (4) Alexopolus

20. How mnay nuclei is/are found in conidia of Albugo

(1) 1 (2) 2-3 (3) 3-8 (4) Many

21. At what stage septa are formed in Albugo

(1) At the time vegetative growth

(2) At the time of haustorial formation

(3) At the time of sexual & asexual reproduction

(4) Never Formed

22. Albugo is found

(1) In dung

(2) In streams

(3) In decaying organic matter

(4) On the leaves of a living plant

23. Which part of the plant is not infected by Albugo

(1) Stem (2) Root

(3) Leaf (4) Flowers

24. Most common methods asexual reproduction in Albugo, by

(1) Zoosporangia (2) Aplanospores

(3) Condiosporangia (4) Zygospore

25. Albugo produces conidiosporangia

(1) In chain (2) In Clusters

(3) Single (4) In Clumps

26. The order of development of conidia in Albugo is

(1) Acropetal (2) Basipetal

(3) Irregular (4) Radial

27. The flagella on the zoospores of Albugo are

(1) Equal & Lateral

(2) Equal and terminal

(3) Unequal and terminal

(4) Unequal and Lateral

28. Albugo draws nutrition form its host by

(1) Extra cellular phagocytosis

(2) Club shaped conifiophores

(3) Tuberculate rhizoids

(4) Globular or Button shaped hasutoria

29. In what form of the food is stored in the mycelium of Albugo

(1) Sugar oil and mainitol

(2) Starch and protein

(3) Protein and cellulsoe

(4) Glycogen and oils

30. Which structure of Albugo exhibits symptoms of white rust disease

(1) Mycelium (2) Conidia

(3) Gametangia (4) Oospore

31. Albugo mycelium can reproduce (a) Sexually (b) Asexually (c) Vagetatively.

(1) ‘a’ and ‘b’ (2) ‘a’ and ‘c’

(3) ‘b’ and ‘c’ (4) ‘a’, ‘b’ & ‘c’

32. The conidiophores of Albugo are

(1) Club shaped and branched

(2) Club shaped and unbranched

(3) Peltate and branched

(4) Peltate and unbranched

33. Secondary infection of white rust could be controlled by

(1) Crop rotation

(2) Use of bordeaux mixture

(3) Soil fumigation

(4) Use D.D.T.

34. Female Gametangium of Albugo is called :

(1) Pisit (2)Archegonium

(3) Ascogonium (4) Oogonium

35. The gametes of Albugo are

(1) Non-flagellted

(2) Flagellated and Motile

(3) Male flagellated & Female non flagellated

(4) Female flagellated & Male non flagellated

36. Meiosis in Albugo occurs at the time of

(1) Gamete formation

(2) Conidia formation

(3) Zoospores formation

(4) Oospore germination

37. Sexual reproduction (or fertilization) can occur with out water in

(1) Ulothrix (2) Albugo

(3) Funaria (4) Fern

38. What is the most economic method of the control of white rust disease of crucifers ?
(1) Soil fumigation
(2) crop rotation
(3) Use of fungicides
(4) Use of antibiotics

39. The secondry infectiion in Albugo is
(1) Wind born (2) Soil born
(3) Water born (4) Seed born

40. Which stage in the life cycle of Albugo candida is not coenocytic
(1) Vegetative mycelium
(2) Conidiosporangia
(3) Zoospores
(4) All of these

41. The flagella on the zoospore of Albugo are
(1) Whisplash type
(2) Tinsel type
(3) One whiplash and one tinsel type
(4) Mixed type

42. Hypertrophy of florat parts in a cruciferous plant is caused by
(1) Conidia of cystopus
(2) Conidiophores of cystopus
(3) Accumulation of hyphae of cytopus for sexual reproduction
(4) All the above

43. To cause infection, the germ tube enters through
(1) Epidermal cell (2) Guard cell
(3) Stomata (4) Lenticels

44. An excessive elargement of a diseased organ due to an increase in the number of its cells is called
(1) Hyperplasia (2) Damping off
(3) Necrosis (4) Hypertrophy

45. Which of the following is the symptom of white rust disease of crucifers
(1) Hypertrophy of floral axis
(2) White blisters on the stem
(3) White blisters on the leaf
(4) All the above

46. Which of the following produced non-motile gamete-
(1) Ulothrix (2) Albugo
(3) Riccia (4) Pteridium

47. Sexual reproduction in Algubo is
(1) Isogamous
(2) Anisogamous
(3) Oogamous
(4) None of these

48. In which stage of Algubo the haploid number of chromosome is found
(1) Conidia (2) Hypha
(3) Gametes (4) Oospore

49. What holds the conidia together into a chain in cytopus (Albugo)
(1) Middle lamella
(2) Cell-wall
(3) Intercalary mucilagenous septum
(4) Plasmodesmata

50. A single mycelium of Albugo is capable of sexual reproduction. Because it is
(1) Dichogamous
(2) Monoecious
(3) Homothallic & self comptatible
(4) Homothallic & self imcomplatible

51. Albugo belongs to
(1) Phycomycetes and zygomycetes
(2) Archaemycetes and Oomycetes
(3) Phycomycetes and Oomycetes
(4) Zygomycetes and archaemycetes

52. A combined solution of copper sulphate and calcium hydroxide which is used as a fungicide is
(1) Collins mixture (2) Bordeaux mixture
(3) Carminative mixture (4) Fehling's solution

53. Which is correct statement : **[RPMT 2001]**
(1) Perithecium is fruiting body of ***Aspergillus***
(2) Sexual reproduction in ***Albugo*** is oogamous
(3) Ascomycetes is known as club fungi.
(4) Sexualreproduction in***Helminthosporium*** is oogamous

54. Botanical name of species which cause white rust of cruciferae : **[RPMT 2002]**

(1) ***Peronospora Parasitica***

(2) ***Puccinia graminis***

(3) ***Pythium debarbanum***

(4) ***Albugo candida***

55. Branched, aseptate, coenocytic, mycelium present in : **[RPMT 2002]**

(1) ***Aspergillus***\ (2) ***Albugo***

(3) ***Pencillium*** (4) ***Erysiphe***

56. ***Albugo candida*** which causes white rust o cruciferae is : **[RPMT 2003]**

(1) Saprophyte

(2) Facultative parasite

(3) Obligate parasite

(4) Obligate saprophyte

57. White rust disease of crucifers is caused by : **[RPMT 2005]**

(1) ***Puccinia*** (2) ***Ustilago***

(3) ***Albugo candida*** (4)***Aspergillus***

ALBUGO ANSWER KEY

Que.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Ans.	**2**	**4**	**3**	**2**	**2**	**3**	**2**	**1**	**4**	**2**	**2**	**1**	**3**	**4**	**1**
Que.	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Ans.	**3**	**3**	**3**	**1**	**3**	**3**	**4**	**2**	**3**	**1**	**2**	**4**	**4**	**4**	**2**
Que.	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
Ans.	**1**	**2**	**2**	**4**	**1**	**1**	**2**	**2**	**1**	**3**	**3**	**3**	**3**	**1**	**4**
Que.	46	47	48	49	50	51	52	53	54	55	56	57			
Ans.	**2**	**3**	**3**	**3**	**3**	**3**	**2**	**2**	**4**	**2**	**3**	**3**			