BOTANY EXCEL 1

1. **Symbiotic nitrogen fixers**

   Bacteria Root nodules of leguminous plants

   Root nodules of non-leguminous plants – ***Casurina and Alder.***

2. **Non-symbiotic nitrogen fixers**

   1. **Blue green algae** ***Nostoc, Gloeocapsa.***

   2. Yeast ***Rhodotorula***

   3. Bacteria ***Aerobacter aerogence, Bacillus, Klebsiella.***

   4. Areobic bacteria ***Acetobactor.***

   5. Anaerobic bacteria **Non photosynthetic** ***Clostridium***

   Photosynthetic ***Rhodospirillum.***

3. **ARBIDOPSIS**

   The model organism for plant study. It has the advantages of small size, small genome, small life cycle etc.

4. **AQUAPORINS**

   Proteins that permits water to cross plasma membrane.

5. **STRAGLERS**

   Plants start life as epiphytes but send roots. Eg. Ficus.

6. **LOMASOMES**

   Structures similar to Mesosomes. These are found in Fungi and higher plants. Lomasomes are formed by the infolding of plasma membrane.

7. **CRYPTOCHROME**

   Light receptor in Cryptogams or non flowering plants. Absorbs blue light and long wavelength UV rays.

8. **SAFFRON**

   Obtained from the style and stigma of Crocus plant.

9. **GREAT BANYAN TREE**

   Grows in EBG Sibpur.

10. **Anastral mitosis** is found in Higher plants.
11. Aquatic plant in which petiole helps in floating is **Eichornia.**
12. **Basal placentation** is found in the family Compositae.
13. The simple mechanical tissue devoid of Lignin is **Collenchyma.**
14. **Genetic material** of Cyanophage is DNA.
15. **Mycoplasma** differs from virus because it has both DNA and RNA.
16. **Nostoc** occurs as **Endophyte** in Cycas, Azolloa, Anthoceros etc.
17. **Spirogyra** is called " ***Pond Scum*** ".
18. **ORGANIC FUNGICIDES**

    Agrosan GN, Ceresan, Thiram, Ziram. Agrosan and Ceresan are Organo mercuric compounds remains as Dithio carbamates.

drishankumar.wordpress.com

19. **Great Irish Potato famine** occurred in 1945 due to the fungus **Phytophthora.**
20. **Bengal famine** occurred in 1942 due to Leaf spot disease of Rice infected by ***Helminthosporium oryzae.***
21. **Alga** showing ***best origin and evolution of sex*** is the **Red alga.**
22. **Rauwolfia serpentina** belongs to the family **Apocynaceae.**
23. Movement of pollen tube is **Thigmotactic**.
24. **Spring wood** is the secondary xylem with tracheids and vessels with wide lumen.
25. **Tyloses** are balloon like ingrowths in tracheids and vessels of heart wood from parenchyma.

26. INTERESTING PLANTS

1. Wolffia	Smallest angiosperm.
2. Zostera	Marine angiosperm.
3. Butter wort	Pingnicula. It is insectivorous plant.
4. Water flea trap	Aldrovanda. It is insectivorous plant.
5. Monophyllea	A plant with single leaf.
6. Tallest grass	Bamboo.
7. Raphia viniflora	Plant with longest leaf.
8. Cyanodon	Evergreen grass. Also called Doob grass.
9. Amorphophalus	Largest Indian Inflorescence.
10. SACS	S-allyl cystine sulphoxide. Anti diabetic material found in Garlic.

dmohankumar.wordpress.com