

Five Kingdom  
Classification

R.H. Whittaker  
(1969)

Protista

Unicellular  
Eukaryotes

Oxygenic  
Photosynthesis in  
Bacteria

Cyanobacteria

Heterocysts

*Nostoc, Anabaena*

Mycoplasma

Lack cell wall

Cell wall embedded with silica and made up of two thin overlapping shells.

Diatoms

Red tides

*Gonyaulax* (Red  
dinoflagellates)

The cell wall of  
fungi

Chitin and  
Polysaccharides

Stiff cellulose plates  
on the outer  
surface of the cell  
wall

Dinoflagellates

Saprophytic Protists

Slime Moulds

Plasmodium of  
Slime moulds

An aggregation  
formed during  
favourable  
conditions

Sleeping Sickness

*Trypanosoma*

Gullet

*Paramoecium*

Malarial parasite

*Plasmodium*

Black stem rust  
disease of wheat

*Puccinia graminis*

Coenocytic hyphae

Phycomycetes

The parasitic fungi  
on Mustard

*Albugo*

Loose smut of barley

*Ustilago nuda*

Dikaryophase

Ascomycetes,  
Basidiomycetes

Imperfect fungi

Deuteromycetes