

Plasmodium (malarial parasite)

History :-

Malaria
✓✓

Mala - (Bad)

Aria - (Air)

Patient

↳ Congested part of cities.

Polluted air

⇒ Lancisi - Abundance of mosquito - occurrence of disease

⇒ *Charles Laveran - Parasite - in the malarial patient.
V.V.I.

⇒ Golgi & celli - R.B.C. of all malarial patient.

Manson

✓Ronald Ross

↳ Female Anopheles - Oocyst

Grassi - Life cycle of Plasmodium in mosquito.

Systematic Position

Kingdom - Protista

Phylum - Protozoa

Sub-Phylum - Plasmodium

Class - Sporozoa (No locomotory organ)

Genus - Plasmodium

Species - P. vivax ✓

About 60 species of Plasmodium

Malaria in[✓] Aves & mammals.

Reptiles,

4 species - Common in Human.

P. vivax - Fever is repeated after every 48 hours.

Tertian fever / Tertian malaria

P. ovale ✓ - Fever is repeated after every 48 hours.
Ovale malaria

P. malariae - Fever is repeated after every 72 hours.

Quartan malaria

P. falciparum - Fatal malaria

Fever - irregularly.

Black Water fever / Cerebral malaria / Aestivo-autumnal
malaria.

Habit & habitat :-

⇒ Digenetic parasite :- Two hosts of two different species.

Parasite → Endoparasite

The Parasite which requires two hosts of two different species to complete its life cycle is called digenetic Parasite.

{ Primary host or Definitive host - Sexual reproduction.

Human

{ Secondary host or Intermediate host :- Asexual reproduction

Anopheles

→ Human - Asexual (R.B.C. & liver) Spleen

→ Anopheles - sexual (Salivary gland & wall of Gut)

Human - Primary host

mosquito - secondary host.

mouth parts of male

"Mandible"



Absent.

260
Bio + chem

80	{	145
50		10
130		155
20		
150		