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(57) Abstract :
Advent of resistance to various antimalarial drugs by plasmodium made malaria more fatal & life-threatening disease in the world. Current need is to invest more effort and interest in research for antimalarials from medicinal plants. Plasmodium yoelii nigeriensis (PYn) is multi drug resistance malaria parasite known for resistance to chloroquine, quinine, quinidine, amodiaquine, halofantrine, mepacrine and mefloquine. The plasmodium yoelii produces hundred percent infection in animals. Innovators in this patent understand the behavior of chloroquine-resistant plasmodium PYn with chloroquine, whole plant extracts of Andrographis paniculata for their resistance reversal. Chloroquine is a first line treatment drugs for malaria all over the world. Wherever, 3-4 times chloroquine doses are not able to produce sufficient antimalarial effect in resistant PYn. As resistance is a prevalent in many parts of the world, reported by hundreds of scientist world wide in malaria. Most of the pure plant extracts are also not able to produce minimal therapeutic response when given alone. Whereas, plant extract shows a better effect when given with minimal dose chloroquine than alone. Andrographis paniculata whole plant ionic to non-ionic extracts (hydroalcoholic to ethanolic extract) dose ranges 300 mg/ to 1000 mg/ kg when combining chloroquine 5 mg/ kg to 20 mg/ kg shows significant Parasitemia and RBC count parameters improvement like earlier efficacy of quinine equivalent antimalarial use. Some other parameters Haemoglobin, survival days & Weight are benefitted as well. Ionic to Non-ionic extracts (hydroalcoholic) extract at higher dosage 1000 mg/ kg produce efficacy then 300 mg/ kg dose group. Our innovation of multi-drug resistant strain of plasmodium supported here in the research to using antimalarial plant extracts during regular malaria treatment to achieve better antimalarial results in the clinical menifestations of malaria and to avoid development of resistance against the used drugs. Also referring standardized plant extract(s) in combination as oral dosage also with prophylactic (travelers) malaria & malaria treatment or food-aid for malaria will. Positive results may pave a path for inclusion of herbal extracts or herbs as side treatment or resistance-breaker food for malaria.

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