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(54) Title:

ANTIMALARIAL COMPOSITION COMPRISING 3-CHLORO-4-(4-CHLOROPHENOXY) ANILINE

(57) Abstract:

An antimalarial composition comprising 3-chloro-4-(4-chlorophenoxy) aniline is disclosed. The present invention concerns the effectiveness of 3-chloro-4-(4-chlorophenoxy) aniline (ANI) of structural Formula (A) below against both CQ-sensitive (3D7) and CQ-resistant (W₂) Plasmodium falciparum isolates in vitro and against Plasmodium berghei in mice. The drug's IC₅₀ concentration is determined by culturing the parasite in media containing radiolabeled hypoxanthine while determination of chemo suppression of drug combinations are based on Peters' 4-day test in P. berghei infected Swiss albino mice using Giemsa-stained thin tail blood smears. It teaches that in the in vitro test, 3-chloro-4-(4-chlorophenoxy) aniline has an IC₅₀ value of 8.1µg/ml against the chloroquine resistant strain (W₂) and an IC₅₀ value of 7.1µg/ml against chloroquine sensitive (3D7). It reveals that the 50% inhibitory concentration of 3-chloro-4-(4-chlorophenoxy) aniline in the Swiss albino mice is 4.18mg/kg thus demonstrating an increased effectiveness over individual drugs portending effective antimalarial drug partnership.