

Plants of the American continent with antimalarial activity

Ingrid R. Mariath, Heloína de S. Falcão, José M. Barbosa-Filho*, Layanna C. F. de Sousa, Anna Cláudia de A. Tomaz, Leônia M. Batista, Margareth de Fátima F. M. Diniz, Petrônio F. Athayde-Filho, Josean Fechine Tavares, Marcelo S. Silva, Emídio Vasconcelos L. da Cunha

Laboratório de Tecnologia Farmacêutica, Universidade Federal da Paraíba, Caixa Postal 5009, 58051-900 João Pessoa, PB, Brazil

RESUMO: “Plantas do continente Americano com atividade antimalárica”. Malária é uma doença parasitária humana causada por protozoários do gênero *Plasmodium*. Esta doença tem acometido populações que habitam regiões tropicais e subtropicais. Anualmente, cerca de 500 milhões de casos ocorrem no mundo, o que permite ser considerada uma doença emergente de importância para a saúde pública. Neste contexto, os produtos naturais, a exemplo das espécies vegetais, têm suas moléculas bioativas como alvo para estudos farmacológicos, toxicológicos e fitoquímicos destinados à síntese de medicamentos mais eficazes para o tratamento de inúmeras doenças. Portanto, este trabalho fornece subsídio às pesquisas com produtos naturais para o tratamento da malária. Nesta revisão, 476 espécies de plantas do continente Americano foram relatadas para a atividade antimalárica, sendo destas 198 ativas e 278 inativas para algum tipo de *Plasmodium*, quando avaliados através de modelos *in vitro* e *in vivo*.

Unitermos: Atividade antimalárica, plantas medicinais, produtos naturais, continente Americano, revisão.

ABSTRACT: Malaria is a human parasitic disease caused by protozoa species of the *Plasmodium* genus. This disease has affected populations of the tropical and subtropical regions. About 500 million new cases occur annually on the world and therefore it is considered an emerging disease of important public health problem. In this context, the natural products as vegetables species have their bioactive molecules as targets for pharmacological, toxicological and phytochemical studies towards the development of more effective medicines for the treatment of many diseases. So this work intends to aid the researchers in the study of natural products to the treatment of malaria. In this review, 476 plants of the American continent were related for the antimalarial activity and of these vegetables species 198 were active and 278 inactive for some type of *Plasmodium* when they were evaluated through of *in vitro* or *in vivo* bioassays models.

Keywords: Antimalarial activity, medicinal plants, natural products, American continent, review.

INTRODUCTION

Malaria is a parasitic disease caused by protozoa species of the *Plasmodium* genus and it is transmitted for human through the bite of infected female mosquito of the *Anopheles* genus (Veronesi, 1991). In each year, about 100 - 500 million people are infected while 1 - 3 million died with malaria in the world. This disease is considered a public health problem of global scale by World Health Organization (WHO, 1997). It is estimated that 40% of the population world lives in areas at risk of infection over 100 countries worldwide, which are include countries of the American continent (Trigger & Kondrachine, 1998).

In the South America, especially in Bolivia, the malaria is responsible for considerable number of morbidity and mortality. According to the Organización Panamericana de la Salud (OPS 1997), 0.7% of the Argentine population lives at risk of infection, but this

percentage could still be higher because cross-border migration and the unrelated cases in the rural areas (Debenedetti et al., 2002). In Colombia, it was registered about 120,000 cases of malaria in the decade of 90, while in Brazil, 509.000 cases were recorded in this same period with 96% of them occurred in the Amazon region (WHO, 1997).

The main species of the genus *Plasmodium* involved on the transmission of the malaria for human are: *P. vivax*, *P. ovale*, *P. falciparum* and *P. malaria*. Therefore, the third specie is the most causer of death (Harrison et al., 1998). Other species of this genus infect animals as *P. knowlesi* (monkeys), *P. berghei* (rodents) and *P. gallinaceum* (fowl). The clinical events are fever, feeling of malaise, chills, muscle pain, fatigue, anemia, compromised liver, spleen and kidney and they occur between 9 and 40 days after the bite of the infected mosquitoes, depending on the species of *Plasmodium* (Neves et al., 2005).

The treatment with single or combined drugs resistant to chloroquine has been used as an alternative therapy for malaria, but they are expensive and sometimes cause signal of toxicity due to limited knowledge about the metabolism and mechanism of action of these antimalarial drugs. However, all these medicines are still essential to reduce the morbidity and mortality caused by malaria, since the vaccine against this disease have limited activity in humans. Therefore, it is necessary to develop new, safe and effective antimalarial medicines. So in recent years, there has also been growing interest in alternative therapies such the use of natural products, especially those derived from plants which have showed to produce promising results for the treatment of many diseases (Rates, 2001). In this context, the present work is a review about plants of the American continent with antimalarial activity.

In the course of our continuing search for bioactive natural products from plants, we have recently published reviews of extracts and compounds derived of plants with the following potential activities: inhibitors of mammary, uterine cervical and ovarian neoplasia (Moura et al., 2001; Moura et al., 2002; Silva et al., 2003); inhibitors of HMG CoA reductase (Gonçalves et al., 2000); with central analgesic activity (Almeida et al., 2001); employed in prevention of osteoporosis (Pereira et al., 2002); for the treatment of Parkinson's disease (Morais et al., 2003); anticonvulsant and anxiety disorders (Quintans-Junior, 2008; Sousa et al., 2008), with antileishmanial (Rocha et al., 2005), giardicidal (Amaral et al., 2006), antileprotic (Barbosa-Filho et al., 2007a), hypoglycemic (Barbosa-Filho et al., 2005) and anti-inflammatory (Falcão et al., 2005; Barbosa-Filho et al., 2006a) activities; inhibitors of the acetylcholinesterase and angiotensin-converting enzyme (Barbosa-Filho et al., 2006b; Barbosa-Filho et al., 2006c), and with antiulcer activity (Falcão et al., 2008a,b; Mota et al., 2009). Our group has also reviewed the medicinal and poisonous plants of the Northeastern region of Brazil (Agra et al., 2007, 2008), among other review articles (Alves et al., 2000; Souza et al., 2005; Gonçalves et al., 2006; Barbosa-Filho et al., 2007b, 2008; Sena-Filho et al., 2008).

MATERIALS AND METHODS

In this article, some reports about vegetable species of the American continent with antimalarial activity were reviewed in the specialized literature published up to December 2007. The search was carried out on data banks such as Biological Abstracts, SciFinder Scholar, Periódicos CAPES, Pubmed and NAPRALERT (acronym for Natural Products ALERT - University of Illinois in Chicago, U.S.A.). The references were consulted for details of the experimental models used for testing the extracts and derivatives vegetables against malaria, activities and organism tested.

RESULTS AND DISCUSSION

For this review, 476 species of plants were listed with possible antimalarial activity and distributed in 103 botanical families. Among those plant species 198 were active and 278 inactive against some *Plasmodium* type causer of malaria when evaluated *in vivo* or *in vitro* bioassays models. The antimalarial activity was evaluated for *P. falciparum*, *P. berghei*, *P. gallinaceum*, *P. vinckei*, *P. lophurae*, *P. cathemerium* and *P. yoelii* stains. The most studied botanical families were Asteraceae, Simaroubaceae, Fabaceae, Meliaceae, Amaryllidaceae, Apocynaceae, Rubiaceae, Velloziaceae and Verbenaceae which showed more than ten species of plants studied. The main studies were developed in Brazil and United States due to the flora biodiversity offered by the first country or the financial-technology resource of the second one. All data are shown in Table 1.

Some researches are validation of the tradicional medicine with the use of plants for the treatment of malaria. *Remijia ferruginea* (Rubiaceae) of which the 80 % ethanol extract obtained of the dried bark at the dose of 500 mg/kg was active against *P. berghei* infected mice (Andrade-Neto et al., 2003) and *Bidens pilosa* (Asteraceae), one plant used in the Brazilian endemic area, showed antimalarial activity to different extracts obtained of dried entire plant, leaves, root or stem against *P. falciparum* and *P. berguei* through of *in vitro* and *in vivo* bioassays models (Brandão et al., 1997; Krettli et al., 2001a,b; Oliveira et al., 2004). Other species of the Asteraceae family is *Vernonia brasiliiana* in which the hexane extract of dried leaves decreased the infection of *P. berghei* in mice and it was inactive for *P. falciparum* *in vitro* model (Carvalho & Krettli, 1991; De Almeida Alves et al., 1997); the decoction and aqueous extract of *Acanthospermum australe* inhibited *in vitro* the growth of *P. falciparum* stain or decreased the infection caused by *P. berghei* in mice (Brandão et al., 1992; Carvalho & Krettli, 1991; Carvalho et al., 1991). Species of the *Artemisia* genus also were studied for antimalarial activity such *A. absinthium*, *A. vulgaris* and *A. ludoviciana*. In the researches, the aqueous extract of the first and second plant did not inhibit *in vitro* the growth of *P. falciparum* (Hernandez et al., 1990), while the 95% ethanol extract of the last specie was active against *P. yoelii* infected mice (Malagon et al., 1997).

The vegetables species of the Cucurbitaceae family were also evaluated to this activity. So the 95% ethanol extract obtained from the dried seed of *Cucurbita maxima* popularly known as pumpkin strawberries was active in dose of 250 mg/kg against *P. berghei* infected mice (Amorim et al., 1991) and *Momordica charantia*, called as melon from São Caetano, had the aqueous and chloroform extracts obtained of the dried flowers or aerial parts inactive against *P. berghei*, *P. gallinaceum*, *P. cathemerium* and *P. lophurae* (Carvalho et al., 1991; Spencer et al., 1947), the 95% ethanol extract obtained

of the dried leaves in the dose of 500 mg/kg was also inactive against *P. berghei* infected mice (Amorim et al., 1991), while the infusion and 95% ethanol extract of the dried leaves and stem in dose of 1.0 g/kg were active against *P. berghei* infected human or mice (Ueno et al., 1996).

Lantana cujabensis Schauer (Verbenaceae) is a shrub found in the Amazonian and Andean forests of South America. Okunade & Lewis (2004) related that the 95% ethanol extract obtained of the dried leaves and stem of this plant had antimalarial activity *in vitro* against *P. falciparum*. Mcphail et al. (2007) evaluated the antimalarial activity of the ethyl acetate extract of marine cyanobacterium *Lyngbya majuscula* (Oscillatoriaceae) *in vitro* model for *P. falciparum*. This extract in the concentration of 2.0 µg/mL inhibited the growth of the protozoa.

Plant species of the Fabaceae family were also evaluated such *Bowdichia virgilioides* which is traditionally used against malaria by American natives had the 95% ethanol extract obtained of the dried bark active in dose of 250 mg/kg to *P. berghei* infected mice and *in vitro* to *P. falciparum* - MRC 20 (IC₅₀ = 1 µg/mL) and *P. berghei* (IC₅₀ = 0.2 µg/mL). In similar, *Caesalpinia pluviosa* also had the 95% ethanol extract of the dried bark active in the dose of 500 mg/kg to *P. berghei* infected mice and *in vitro* to *P. falciparum* - MRC 20 (IC₅₀ = 15 µg/mL) and *P. berghei* (IC₅₀ = 8.3 µg/mL).

Species of plants of the Lauraceae family such *Nectandra* aff. *hihua* and *Licaria canella* had the 95% ethanol extract active when evaluated against *P. falciparum* - MRC 20 and *P. berghei* *in vitro* and *in vivo* bioassays models. However, the 95 % ethanol extract of the dried bark of *Protium glabrescens* (Bursaceae) in the 100 mg/kg dose was only active *in vivo* model to *P. berguei*, while it was inactive *in vitro* model to *P. falciparum* - MRC 20 and *P. berghei* (Deharo et al., 2001).

Also were related in scientific literature some species of the Solanaceae family with antimalarial activity. The plant *Solanum nudum* has been used by American community as Tumaco in Colombia to cure malaria and in according to Marcela et al. (2001), the aqueous extract obtained of the dried leaves and stem (0.3 % w/v - i.p.) was active against the *P. berghei* infected mice. The 95% ethanol extracts of the dried leaves of *Dunalia brachyacantha* and *Saracha punctata* were tested *in vitro* models for *P. falciparum*, so the first plant was active while the second one showed inactive. Both the extracts also were evaluated *in vivo* models to *P. vinckei* and all were active (Moretti et al., 1998; Munoz et al., 2000). However, the 95% ethanol and hexane extracts of *Acnistus arborescens* did not have this activity for *P. berghei* stain (Brandão et al., 1985).

Picrasma crenata (Veil.) Engl. (Simaroubaceae) is known as 'granadillo' or 'quasia', 'palo amargo' in Argentina and it is indicated such an antimalarial, febrifuge, tonic, antisyphilitic and insecticide. The aqueous and methanol extracts of the dried aerial parts this plant showed antimalarial activity *in vitro* for *P. falciparum* K-1 (Debenedetti et al., 2002). Other species from this botanical genus such *P. excelsa* and *P. antillana* did not have this activity for *P. gallinaceum* infected

chicken when the methanol and chloroform extracts obtained from the wood were used (Spencer et al., 1947).

Other species used by American population did not have antimalarial activity in condition evaluated. Such the 80% ethanol extract of *Strychnos pseudoquina* (Loganiaceae) in the dose of 1,000 mg/kg (Andrade-Neto et al., 2003) and the aqueous extract obtained from the dried bark of *Coutarea hexandra* (Rubiaceae) when it was evaluated to *P. berghei* infected mice (Carvalho et al., 1991). In similar, *Deianira erubescens* (Gentianaceae) also did not show activity with the 80% ethanol extract obtained from the dried leaves and root (Andrade-Neto et al., 2003). The aqueous extract of the dried leaves of *Lisianthus speciosus* was active against *P. berghei* infected mice and *in vitro* for *P. falciparum* stain (Carvalho & Krettli, 1991), while the same extract obtained of the dried root was inactive for *P. berghei* infected mice (Carvalho et al., 1991). In study elaborated by Diaz & Medina (1996), the chloroform extract obtained from the dried stem bark of *Tabebuia ochracea* ssp. *neochrysantha* (Bignoniaceae) which is traditionally used against malaria in the Amazon did not show bioactivity *in vitro* against *P. berghei*.

CONCLUSION

Plants represent a vital source to research new active principles for the treatment of human diseases such as malaria which is considered neglected and emergent in American countries because the high incidence of attacks of the female *Anopheles* mosquitoes infected with *Plasmodium* spp at risk of infection regions such the forests areas. In this paper a variety of plants of the American continent evaluated against the main protozoa causer of the malaria was related. However, we conclude that the plants with antimalarial activity are a few and they do not have this therapeutic property fully defined. Therefore, in this context, it is necessary to support financially the multidisciplinary and interdisciplinary research, mostly those related to natural products enabling the discovery of new antimalarial pharmaceuticals.

ACKNOWLEDGMENTS

The authors thanks to College of Pharmacy, the University of Illinois at Chicago, U.S.A., for helping with the computer database NAPRALERT. And are grateful to CNPq and CAPES for financial support and research fellowships.

REFERENCES

- Agra MF, França PF, Barbosa-Filho JM 2007. Synopsis of the plants known as medicinal and poisonous in Northeast of Brazil. *Rev Bras Farmacogn* 17: 114-140.
- Agra MF, Silva KN, Basilio IJLD, França PF, Barbosa-Filho JM 2008. Survey of medicinal plants used in the region Northeast of Brazil. *Rev Bras Farmacogn* 18: 472-508.
- Almeida RN, Navarro DS, Barbosa-Filho JM 2001. Plants with central analgesic activity. *Phytomedicine* 8: 310-322.
- Alves JS, Castro JC, Freire MO, Cunha EVL, Barbosa-Filho JM, Silva MS 2000. Complete assignment of the 1H

- and 13C spectra of four triterpenes of the ursane, artane, lupane and friedelane groups. *Magn Reson Chem* 38: 201-206.
- Amaral FMM, Ribeiro MNS, Barbosa-Filho JM, Reis AS, Nascimento FRF, Macedo RO 2006. Plants and chemical constituents with giardicidal activity. *Rev Bras Farmacogn* 16: 696-720.
- Amorim CZ, Flores CA, Gomes BE, Marques AD, Cordeiro RSB 1988. Screening for antimalarial activity in the genus *Pothomorphe*. *J Ethnopharmacol* 24: 101-106.
- Amorim CZ, Marques AD, Balão RS 1991. Screening of the antimalarial activity of plants of Cucurbitaceae family. *Mem Inst Oswaldo Cruz* 86: 177-180.
- Andrade-Neto VF, Brandão MGL, Stehmann JR, Oliveira LA, Krettl AU 2003. Antimalarial activity of *Cinchona*-like plants used to treat fever and malaria in Brazil. *J Ethnopharmacol* 87: 253-256.
- Antoun MD, Gerena L, Milhous WK 1993. Screening of the flora of Puerto Rico for potential antimalarial bioactives. *Int J Pharmacogn* 31: 255-258.
- Antoun MD, Ramos Z, Vazques J, Oquendo I, Proctor GR, Gerena L, Franzblau SG 2001. Evaluation of the flora of Puerto Rico for *in vitro* antiplasmodial and antimycobacterial activities. *Phytother Res* 15: 638-624.
- Banerjee JN, Lewis JJ 1954. Pharmacological studies in the *Apocynaceae* genus *Aspidosperma* Mart. & Zucc., *Aspidosperma oblongum* A. D. C. *J Pharm Pharmacol* 6: 246-252.
- Barbosa-Filho JM, Vasconcelos THC, Alencar AA, Batista LM, Oliveira RAG, Guedes DN, Falcão HS, Moura MD, Diniz MFFM, Modesto-Filho J 2005. Plants and their active constituents from South, Central, and North America with hypoglycemic activity. *Rev Bras Farmacogn* 15: 392-413.
- Barbosa-Filho JM, Piuvezam MR, Moura MD, Silva MS, Lima KVB, Cunha EVL, Fecine IM, Takemura OS 2006a. Anti-inflammatory activity of alkaloids: a twenty century review. *Rev Bras Farmacogn* 16: 109-139.
- Barbosa-Filho JM, Medeiros KCP, Diniz MFFM, Batista LM, Athayde-Filho PF, Silva MS, Cunha EVL, Almeida JRGS, Quintans-Júnior LJ 2006b. Natural products inhibitors of the enzyme acetylcholinesterase. *Rev Bras Farmacogn* 16: 258-285.
- Barbosa-Filho JM, Martins VKM, Rabelo LA, Moura MD, Silva MS, Cunha EVL, Souza MFV, Almeida RN, Medeiros IA 2006c. Natural products inhibitors of the angiotensin converting enzyme (ACE). A review between 1980-2000. *Rev Bras Farmacogn* 16: 421-446.
- Barbosa-Filho JM, Nascimento-Júnior FA, Tomaz ACA, Athayde-Filho PF, Silva MS, Cunha EVL 2007a. Natural products with antileptotic activity. *Rev Bras Farmacogn* 17: 141-148.
- Barbosa-Filho JM, Sena-Filho JG, Durringer JM, Uchoa DEA, Xavier HS, Braz-Filho R 2007b. Distribution of iridoid glucosides in plants from the genus *Lippia* (Verbenaceae): An investigation of *Lippia alba* (Mill.) N.E. Brown. *Nat Prod Commun* 2: 715-716.
- Barbosa-Filho JM, Alencar AA, Nunes XP, Tomaz ACA, Sena-Filho JG, Athayde-Filho PF, Silva MS, Souza MFV, da-Cunha EVL 2008. Sources of alpha-, beta-, gamma-, delta- and epsilon-carotenes: A twentieth century review. *Rev Bras Farmacogn* 18: 135-154.
- Bastos JK, Gottlieb OR, Sarti SJ, Filho DS 1996. Isolation of lignans and sesquiterpenoids from leaves of *Zanthoxylum naranjillo*. *Nat Prod Lett* 9: 65-70.
- Becker ER 1949. Report on the thirty-five drugs and three plant materials tested against *Plasmodium lophurae* in the white pekin duck. *Iowa State Coll J Sci* 23: 189.
- Blair S, Mesa J, Correa A, Carmona-Fonseca J, Granados H, Saez J 2002. Antimalarial activity of neurolepin B and derivatives of *Eupatorium inulaefolium* (Asteraceae). *Pharmazie* 57: 413-415.
- Brandão M, Botelho M, Krettl E 1985. Antimalarial experimental chemotherapy using natural products. *Cienc Cult* 37: 1152-1163.
- Brandão MGL, Grandi TSM, Rocha EMM, Sawyer DR, Krettl AU 1992. Survey of medicinal plants used as antimalarials in the Amazon. *J Ethnopharmacol* 36: 175-182.
- Brandão MGL, Krettl AU, Soares LSR, Nerey CGC, Marinuzzi HC 1997. Antimalarial activity of extracts and fractions from *Bidens pilosa* and other *Bidens* species (Asteraceae) correlated with the presence of acetylene and flavonoid compound. *J Ethnopharmacol* 57: 131-138.
- Bravo JA, Sauvain M, Gimenez A, Munoz V, Callapa J, Le Men-Olivier L, Massiot G, Lavaud C 1999. Bioactive phenolic glycosides from *Amburana cearensis*. *Phytochemistry* 50: 71-74.
- Bray DH, Warhurst DC, Connolly JD, O'Neill MJ, Phillipson JD 1990. Plants as sources of antimalarial drugs. Part 7. Activity of some species of Meliaceae plants and their constituent limonoids. *Phytother Res* 4: 29-35.
- Bustillos F, Flores Y, Almanza G 2002. Triterpenoids from *Polypodium decumanum*. *Rev Boliv Quim* 19: 34-38.
- Cabral JA, Mc Chesney JD, Milhous WK 1993. A new antimalarial quassinoid from *Simaba guianensis*. *J Nat Prod* 56: 1954-1961.
- Calderon AI, Angerhofer CK, Pezzuto JM, Farnsworth NR, Foster R, Condit R, Gupta MP, Soejarto DD 2000. Forest plot as a tool to demonstrate the pharmaceutical potential of plants in a tropical forest of Panama. *Econ Bot* 54: 278-294.
- Camacho MR, Phillipson JD, Croft SL, Marley D, Kirby G, Dwarhurs DC 2002. Assessment of the antiprotozoal activity of *Galphimia glauca* and the isolation of new nor-secofriedelanes and norfriedelanes. *J Nat Prod* 65: 1457-1461.
- Carvalho LH, Brandão MGL, Santos-Filho D, Lopes JLC, Krettl AU 1991. Antimalarial activity of crude extracts from brazilian plants studies *in vivo* in *Plasmodium berghei*-infected mice and *in vitro* against *Plasmodium falciparum* in culture. *Braz J Med Biol Res* 24: 1113-1123.
- Carvalho LH, Krettl AU 1991. Antimalarial chemotherapy with natural products and chemically defined molecules. *Mem Inst Oswaldo Cruz* 86: 181-184.
- Carvalho LH, Ferrari WMS, Krettl AU 1992. A method for screening drugs against the liver stages of malaria using *Plasmodium gallinaceum* and *Aedes mosquitos*. *Braz J Med Biol Res* 25: 247-255.
- Chaturvedula VSP, Farooq A, Schilling JK, Malone S, Derveld I, Werkhoven MCM, Wisse JH, Ratsimbason M, Kingston DGI 2004. New eudesmane derivatives from *Melampodium camphoratum* from the Suriname rainforest. *J Nat Prod* 67: 2053-2057.
- De Almeida Alves TM, Nagem TJ, De Carvalho CL, Krettl AU, Zani CL 1997. Antiplasmodial triterpene from *Vernonia brasiliensis*. *Planta Med* 63: 554-555.
- Debenedetti S, Muschietti LM, Baren CV, Clavin M, Broussalis A, Martino V, Houghton PJ, Warhurst D, Steele J 2002. *In vitro* antiplasmodial activity of extracts of Argentinian plants. *J Ethnopharmacol* 80: 163-166.
- Deharo E, Bourdy G, Quenevo C, Munoz V, Ruiz G, Sauvain

- M 2001. A search for natural bioactive compounds in Bolivia through a multidisciplinary approach. Part V. Evaluation of the antimalarial activity of plants used by the Tacana Indians. *J Ethnopharmacol* 77: 91-98.
- Diaz F, Medina JD 1996. Furanonaphthoquinones from *Tabebuia ochracea* ssp. *neochrysantha*. *J Nat Prod* 59: 423-424.
- Dominguez JA 1932. Malaria treatment with *Aspidosperma* Quebracho Blanco. *Rev Farm (Buenos Aires)* 73: 82.
- Falcão HS, Lima IO, Santos VL, Dantas HF, Diniz MFFM, Barbosa-Filho JM, Batista LM 2005. Review of the plants with anti-inflammatory activity studied in Brazil. *Rev Bras Farmacogn* 15: 381-391.
- Falcão HS, Mariath IR, Diniz MFFM, Batista LM, Barbosa-Filho JM 2008a. Plants of the American continent with antiulcer activity. *Phytomedicine* 15: 132-146.
- Falcão HS, Leite JA, Barbosa-Filho JM, Athayde-Filho PF, Chaves MCO, Moura MD, Ferreira AL, Almeida ABA, Souza-Brito ARM, Diniz MFFM, Batista LM 2008b. Gastric and duodenal antiulcer activity of alkaloids: a review. *Molecules* 13: 3198-3223.
- Federici E, Palazzino G, Nicoletti M, Galeffi C 2000. Antiplasmodial activity of the alkaloids of *Peschiera fuchsiaeifolia*. *Planta Med* 66: 93-95.
- Francois G, Passreiter CM, Woerdenbag HJ, Van Looveren M 1996. Antiplasmodial activities and cytotoxic effects of aqueous extracts and sesquiterpene lactones from *Neurolaena lobata*. *Planta Med* 62: 126-129.
- Franssen FFJ, Simeijsters LJJW, Berger I, Aladan BEM 1997. *In vivo* and *in vitro* antiplasmodial activities of some plants traditionally used in Guatemala against malaria. *Antimicrob Agents Chemother* 41: 1500-1503.
- Froelich S, Onegi B, Kakooko A, Siems K, Schubert C, Jenett-Siems K 2007. Plants traditionally used against malaria: phytochemical and pharmacological investigation of *Momordica foetida*. *Rev Bras Farmacogn* 17: 1-7.
- Froelich S, Gupta MP, Siems K, Jenett-Siems K 2008. Phenylethanoid glycosides from *Stachytarpheta cayennensis* (Rich.) Vahl, Verbenaceae, a traditional antimalarial medicinal plant. *Rev Bras Farmacogn* 18: 517-520.
- Gantier JC, Fournet A, Munos MH, Hocquemiller R 1996. The effect of some 2-substituted quinolines isolated from *Galipea longiflora* on *Plasmodium vinckei* Petteri infected mice. *Planta Med* 62: 285-286.
- Gertsch J, Niomawe, Gertsch-Roost K, Sticher O 2004. *Phyllanthus piscatorum*, ethnopharmacological studies on a women's medicinal plant of the Yanomami Amerindians. *J Ethnopharmacol* 91: 181-188.
- Gonçalves MCR, Moura LSA, Rabelo LA, Barbosa-Filho JM, Cruz HMM, Cruz J 2000. Natural products inhibitors of HMG CoA reductase. *Rev Bras Farm* 81: 63-71.
- Gonçalves MCR, Melo Diniz MFFM, Borba JDC, Nunes XP, Barbosa-Filho JM 2006. Berinjela (*Solanum melongena* L.) - mito ou realidade no combate as dislipidemias? *Rev Bras Farmacogn* 16: 252-257.
- Harrison TR, Fauci AS, Braunwald E, Isselbacher KJ, Wilson JD, Martin JB, Kasper DL, Hauser SL, Longo DL 1998. *Medicina Interna*. 14.ed. Rio de Janeiro: Mc Graw Hill.
- Hernandez H, Mendiola J, Torress D, Garrido N, Perez N 1990. Effect of aqueous extracts of *Artemisia* on the *in vitro* culture of *Plasmodium falciparum*. *Fitoterapia* 61: 540-541.
- Jacquemond-Collet I, Benoit-Vical F, Alexix Valenti M, Stanislas E, Mallie M, Fouraste I 2002. Antiplasmodial and cytotoxic activity of galipine and other tetrahydroquinolines from *Galipea officinalis*. *Planta Med* 68: 68-69.
- Jenett Siems K, Siems K, Jakupovic J, Solis PN, Gupta MP, Mockenhaupt FP, Bienzle U, Eich E 2000. Sipandinolide: a butenolide including a novel type of carbon skeleton from *Siparuna andina*. *Planta Med* 66: 384-385.
- Jensen JF, Kvist LP, Christensen SB 2002. An antiplasmodial lignan from *Euterpe precatoria*. *J Nat Prod* 65: 1915-1917.
- Kohler I, Lenett Siems K, Mockenhaupt FP, Siems K, Jakupovic J, Gonzalez JC, Hernandez MA, Ibarra RA, Berensohn WG, Bienzle U, Eich E 2001. *In vitro* antiplasmodial activity of 4-phenylcoumarins from *Exostema mexicanum*. *Planta Med* 67: 89-91.
- Kraft C, Jenett Siems K, Siems K, Gupta MP, Bienzle U, Eich E 2000. Antiplasmodial activity of isoflavones from *Andira inermis*. *J Ethnopharmacol* 73: 131-135.
- Kraft C, Jenett Siems K, Siems K, Solis PN, Gupta MP, Bienzle U, Eich E 2001. Andinermals A-C, antiplasmodial constituents from *Andira inermis*. *Phytochemistry* 58: 769-774.
- Krettli AU, Andrade-Neto VF, Brandão MDGL, Ferrari WMS 2001a. The search for new antimalarial drugs from plants used to treat fever and malaria or plants randomly selected: a review. *Mem Inst Oswaldo Cruz* 96: 1033-1042.
- Krettli AU, Brandão MDGL, Ferrari WMS 2001b. New antimalarial drugs: a search based on plants used in popular medicine to treat fever and malaria. *Folha Med* 120: 119-126.
- Levander OA, Ager AL, Morris VC, May RG 1991. Protective effect of ground flaxseed or ethyl linolenate in a vitamin e-deficient diet against murine malaria. *Nutr Res* 11: 941-948.
- Loizaga NS, Sagastume LC 1935. Malaria treatment with "Quechuo-Dominguez". *Semana Med Buenos Aires* 562-566.
- Lopes NP, Kato MJ, Andrade EHDEA, Maia JS, Yoshida M, Planchart AR, Katzin AM 1999. Antimalarial use of volatile oil from leaves of *Viola surinamensis* (Rol.) Warb. by Waiapi Amazon Indians. *J Ethnopharmacol* 67: 313-319.
- Lovy A, Knowles B, Labbe R, Nolan L 1999. Activity of Edible mushrooms against the growth of human T4 leukemic cancer cells, HELA cervical cancer cells and *Plasmodium falciparum*. *J Herbs Spices Med Plants* 6: 49-57.
- MacKinnon S, Durst T, Arnason JT, Angerhofer CJ, Pezzuto JM, Sanchez-Vindas PE, Poveda LJ, Gbeassor M 1997. Antimalarial activity of tropical Meliaceae extracts and Gedunin derivatives. *J Nat Prod* 60: 336-341.
- Makler MT 1994. The effect of cocaine on the growth of *Plasmodium falciparum* *in vitro*. *Trans Roy Soc Trop Med Hyg* 88: 444.
- Malagon F, Vazquez J, Dalgado G, Ruiz A 1997. Antimalaric effect of an alcoholic extract of *Artemisia ludoviciana* Mexicana in a rodent malaria model. *Parasitology* 39: 3-7.
- Marcela E, Silvia B, Jaime C, Pilar P 2001. Effect of *Solanum nudum* extracts on the liver of mice infected with *Plasmodium berghei*. *Amer J Chinese Med* 29: 477-484.
- Mcphail KL, Correa J, Linington RG, Gonzalez J, Ortega-Barria E, Capson TL, Gerwick WH 2007. Antimalarial linear lipopeptides from a Panamanian strain of the marine Cyanobacterium *Lyngbya majuscula*. *J Nat Prod* 70: 984-988.
- Mess J, Blair S, Saez J, Correa A, Carmona J 1998. *In*

- in vitro* antimalarial evaluation of extracts of plants *Alternanthera*. *An Quim Int Ed* 92: 67-70.
- Montenegro LHM, Oliveira PES, Conserva LM, Rocha EMM, Brito AC, Araujo RM, Trevisan MTS, Lemos RPL 2006. Terpenoids and evaluation of the antimalarial, larvicidal, anti-radicalar and anticholinesterase potential of *Pouteria venosa* (Sapotaceae). *Ver Bras Farmacogn* 16: 611-617.
- Morais LCSL, Barbosa-Filho JM, Almeida RN 2003. Plants and bioactive compounds for the treatment of Parkinson's disease. *Arquivos Brasileiros de Fitomedicina Científica* 1: 127-132.
- Moretti C, Sauvain M, Lavaud C, Massiot G, Bravo JA, Munoz V 1998. A novel antiprotozoal aminosteroid from *Saracha punctata*. *J Nat Prod* 61: 1390-1393.
- Mota KSL, Dias GEN, Pinto MEF, Luiz-Ferreira A, Souza-Brito ARM, Hiruma-Lima CA, Barbosa-Filho JM, Batista LM 2009. Flavonoids with gastroprotective activity. *Molecules* 14: In Press, DOI: 10.3390/molecules140x000x.
- Moura MD, Torres AR, Oliveira RAG, Diniz MFFM, Barbosa-Filho JM 2001. Natural products as inhibitors of models of mammary neoplasia. *Brit J Phytother* 5: 124-145.
- Moura MD, Silva JS, Oliveira RAG, Diniz MFFM, Barbosa-Filho JM 2002. Natural products reported as potential inhibitors of uterine cervical neoplasia. *Acta Farm Bonaerense* 21: 67-74.
- Muhammad I, Dunbar DC, Takamatsu S, Walker LA, Clark AM 2001. Antimalarial, cytotoxic, and antifungal alkaloids from *Duguetia hadrantha*. *J Nat Prod* 64: 559-562.
- Muhammad I, Dunbar DC, Khan SI, Tekwani BL, Bedir E, Takamatsu S, Ferreira D, Walker LA 2003. Antiparasitic alkaloids from *Psychotria klugii*. *J Nat Prod* 66: 962-967.
- Munoz V, Sauvain M, Bourdy G, Arrazola S, Callapa J, Ruiz G, Choque J, Deharo E 2000. A search for natural bioactive compounds in Bolivia through a multidisciplinary approach part III. Evaluation of the antimalarial activity of plants used by Altenos Indians. *J Ethnopharmacol* 71: 123-131.
- Neves DP, Melo AL, Genaro O, Linardi PM 2005. *Parasitologia Humana*. 11.ed. Rio de Janeiro: Atheneu.
- Noster S, Kraus LJ 1990. *In vitro* antimalarial activity of *Coutarea latiflora* and *Exostema caribaeum* extracts on *Plasmodium falciparum*. *Planta Med* 56: 63-65.
- Okunade AL, Bikoff RE, Casper SJ, Oksman A, Goldberg DE, Lewis WH 2003. Antiplasmodial activity of extracts and quassinoids isolated from seedlings of *Ailanthus altissima* (Simaroubaceae). *Phytother Res* 17: 675-677.
- Okunade AL, Lewis WH 2004. Oleanene constituents of *Lantana cujabensis*. *Fitoterapia* 75: 327-331.
- Oliveira FQ, Andrade-Neto V, Krettli AU, Brandão MGL 2004. New evidences of antimalarial activity of *Bidens pilosa* root correlated with polyacetylene and flavonoids. *J Ethnopharmacol* 93: 39-42.
- O'Neill MJ, Bray DH, Boardman P, Phillipson JD, Warhurst DC 1985. Plants as sources of antimalarial drugs. Part.1. *In vitro* test method for the evaluation of crude extracts from plants. *Planta Med* 51: 394-398.
- O'Neill MJ, Bray DH, Boardman P, Wright CW, Phillipson JD, Warhurst DC, Gupta MP, Correya M, Solis P 1987. The activity of *Simarouba amara* against chloroquine-resistant *Plasmodium falciparum* *in vitro*. *J Pharm Pharmacol Suppl* 39: 80P
- O'Neill MJ, Bray DH, Boardman P, Wright CW, Phillipson JD, Warhurst DC, Gupta MP, Correya M, Solis P 1988. Plants as sources of antimalarial drugs. Part 6: activities of *Simarouba amara* fruits. *J Ethnopharmacol* 22: 183-190.
- OPS 1997. Organización Panamericana de la Salud. Indicadores Básicos. Situación de Salud en las Américas.
- Palmeira Júnior SF, Conserva LM, Barbosa-Filho JM 2006. Clerodane diterpenes from *Croton* species: Distribution and the compilation of their ¹³C NMR spectral data. *Nat Prod Commun* 1: 319-344.
- Pereira JV, Modesto-Filho J, Agra MF, Barbosa-Filho JM 2002. Plant and plant-derived compounds employed in prevention of the osteoporosis. *Acta Farm Bonaerense* 21: 223-234.
- Phillipson JD, O'Neill MJ 1986. Novel antimalarial drugs from plants? *Parasitology* 2: 355-358.
- Quintans-Júnior LJ, Almeida JRGS, Lima JT, Nunes XP, Siqueira JS, Oliveira LEG, Almeida RN, Athayde-Filho PF, Barbosa-Filho JM 2008. Plants with anticonvulsant properties - a review. *Rev Bras Farmacogn* 18 (Supl.): 798-819.
- Rates SMK 2001. Plants as source of drugs. *Toxicon* 39: 603-613.
- Rocha LG, Almeida JRGS, Macedo RO, Barbosa-Filho JM 2005. A review of natural products with antileishmanial activity. *Phytomedicine* 12: 514-535.
- Seeler AO, Dusenbery E, Malanga C 1943. The comparative activity of quinine, quinidine, cinchonine, cinchonidine and quinoidine against *Plasmodium lophurae* infections of pekin ducklings. *J Pharmacol Exp Ther* 78: 159-163.
- Sena-Filho JG, Düringer JM, Maia GLA, Tavares JF, Xavier HS, Silva MS, Cunha EVL, Barbosa-Filho JM 2008. Ecdysteroids from *Vitex* species: Distribution and compilation of their ¹³C-NMR spectral data. *Chem Biodivers* 5: 707-713.
- Silva JS, Moura MD, Oliveira RAG, Diniz MFFM, Barbosa-Filho JM 2003. Natural product inhibitors of ovarian neoplasia. *Phytomedicine* 10: 221-232.
- Sousa FCF, Melo CTV, Cito MCO, Félix FHC, Vasconcelos SMM, Fonteles MMF, Barbosa-Filho JM, Viana GSB 2008. Plantas medicinais e seus constituintes bioativos: Uma revisão da bioatividade e potenciais benefícios nos distúrbios da ansiedade em modelos animais. *Rev Bras Farmacogn* 18: 642-654.
- Souza EL, Stamford TLM, Lima EO, Trajano VN, Barbosa-Filho JM 2005. Antimicrobial effectiveness of spices: an approach for use in food conservation systems. *Braz Arch Biol Technol* 48: 549-558.
- Spencer CF, Koniuszy FR, Rogers EF, Shavel Junior J, Easton NR, Kaczka EA, Kuehl Junior FA, Phillips RF, Walti A, Folkers K, Malanga C, Seeler AO 1947. Survey of plants for antimalarial activity. *Lloydia* 10: 145-174.
- Steele JCP, Veitch NC, Kite GC, Simmonds MSJ, Warhurst DC 2002. Indole and beta-carboline alkaloids from *Geissospermum sericeum*. *J Nat Prod* 65: 85-88.
- Trigger PI, Kondrachine AV 1998. Commentary: Malaria control in the 1990s. *Bull WHO* 76: 11.
- Ueno HM, Doyama JT, Padovani E, Salata CR 1996. Effect of *Momordica charantia* L. in mice infected with *Plasmodium berghei*. *Rev Soc Bras Med Trop* 29: 455-460.
- Veronesi R. 1991. *Doenças Infeciosas e Parasitárias*. 8.ed. Rio de Janeiro: Guanabara Koogan.
- Wasicky R, Unti O, Barbieri E 1942. Quinine and alkaloids in Brazil. *An Fac Farm Odontol Univ Sao Paulo* 3: 137.
- WHO 1997. World Health Organization. World malaria situation in 1994. *Wkly Epidemiol Rec* 1992; 67: 161-167.

Table 1. Plants of the American continent evaluated for antimalarial activity.

Botanical family and scientific names	Country	Part of the plant	Extract of the plant	Organism tested and <i>Plasmodium</i> specie	Results	Reference
AGAVACEAE						
<i>Sansevieria guineensis</i> Willd	Guatemala	DL	H ₂ O soluble fraction MeOH Ext. CH ₂ Cl ₂ Ext.	Mouse/ <i>Plasmodium berghei</i> Mouse/ <i>Plasmodium berghei</i> <i>In vitro/Plasmodium falciparum</i>	Inactive Active Active	Franssen et al., 1997 Franssen et al., 1997 Franssen et al., 1997
		DRt	H ₂ O soluble fraction MeOH Ext. CH ₂ Cl ₂ Ext.	Mouse/ <i>Plasmodium berghei</i> Mouse/ <i>Plasmodium berghei</i> <i>In vitro/Plasmodium falciparum</i>	Inactive Active Active	Franssen et al., 1997 Franssen et al., 1997 Franssen et al., 1997
AMARANTHACEAE						
<i>Alternanthera lanceolata</i> Schinz	Colombia	DAP	95% EtOH Ext.	<i>In vitro/Plasmodium falciparum</i>	Active	Mess et al., 1998
AMARYLLIDACEAE						
<i>Amaryllis belladonna</i> L.	USA	Bb	H ₂ O Ext. CHCl ₃ Ext.	Chicken/ <i>Plasmodium gallinaceum</i> Chicken/ <i>Plasmodium gallinaceum</i>	Active Inactive	Spencer et al., 1947 Spencer et al., 1947
<i>Boophone disticha</i> (L.F.) Herb.	USA	Bb	H ₂ O Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Active	Spencer et al., 1947
<i>Chlidanthus fragrans</i> (Fairy Lily)	USA	Bb	H ₂ O Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Active	Spencer et al., 1947
<i>Cooperia pedunculata</i> Herb.	USA	Bb	CHCl ₃ Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Active	Spencer et al., 1947
<i>Crinum americanum</i> L.	USA	Bb	H ₂ O Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Active	Spencer et al., 1947
<i>Crinum grandiflorum</i> Deleuil	USA	Bb	H ₂ O Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Active	Spencer et al., 1947
<i>Crinum longifolium</i> (L.) Thunb.	USA	Bb	CHCl ₃ Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Active	Spencer et al., 1947
<i>Habranthus texanus</i> Herbert	USA	Bb	H ₂ O Ext. CHCl ₃ Ext.	Chicken/ <i>Plasmodium gallinaceum</i> Chicken/ <i>Plasmodium gallinaceum</i>	Active Active	Spencer et al., 1947 Spencer et al., 1947
<i>Hippeastrum flammigerum</i> C. F.	USA	Bb	CHCl ₃ Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Active	Spencer et al., 1947
<i>Hippeastrum puniceum</i> Kuntze	USA	Bb	CHCl ₃ Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Active	Spencer et al., 1947
<i>Hippeastrum vittatum</i> Herbert	USA	Bb	CHCl ₃ Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Active	Spencer et al., 1947
<i>Hymenocallis americana</i> Roem	USA	Bb	H ₂ O Ext. CHCl ₃ Ext.	Chicken/ <i>Plasmodium gallinaceum</i> Chicken/ <i>Plasmodium gallinaceum</i>	Active Active	Spencer et al., 1947 Spencer et al., 1947
<i>Hymenocallis expansa</i> (Herb.)	Puerto Rico	DL	95 % EtOH Ext.	<i>In vitro/Plasmodium falciparum</i>	Active	Antoun et al., 2001
<i>Lycoris radiata</i> L. Squamigera	USA	Bb	H ₂ O Ext. CHCl ₃ Ext.	Chicken/ <i>Plasmodium gallinaceum</i> Chicken/ <i>Plasmodium gallinaceum</i>	Active Inactive	Spencer et al., 1947 Spencer et al., 1947
ANACARDIACEAE						
<i>Mangifera indica</i> L.	USA	Bk	H ₂ O Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
<i>Schinus andinus</i> I.M. Johnston	Bolivia	DB + L	95 % EtOH Ext.	<i>In vitro/Plasmodium falciparum</i>	Active	Munoz et al., 2000
<i>Schinus terebinthifolius</i> Raddi	Brazil	*	95 % EtOH Ext.	Rat/ <i>Plasmodium vinckei</i> Mouse/ <i>Plasmodium berghei</i>	Inactive Inactive	Munoz et al., 2000 Brandão et al., 1985
ANNONACEAE						
<i>Annona glabra</i> L.	Puerto Rico	*	95 % EtOH Ext.	<i>In vitro/Plasmodium falciparum</i> <i>In vitro/Plasmodium falciparum</i>	Inactive Inactive	Antoun et al., 1993 Antoun et al., 1993

Botanical family and scientific names	Country	Part of the plant	Extract of the plant	Organism tested and <i>Plasmodium</i> specie	Results	Reference
<i>Ammonia muricata</i> L.	Puerto Rico	DL	95 % EtOH Ext.	<i>In vitro/Plasmodium falciparum</i>	Active	Antoun et al., 1993
	USA	Wd	H ₂ O Ext.	<i>In vitro/Plasmodium falciparum</i>	Inactive	Antoun et al., 1993
			CHCl ₃ Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
			MeOH Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
<i>Ammonia spraguei</i> Saif.	Panama	DSmBk		<i>In vitro/Plasmodium falciparum</i>	Active	Calderon et al., 2000
		*	95 % EtOH Ext.	<i>In vitro/Plasmodium falciparum</i>	Active	Calderon et al., 2000
<i>Duguetia furfuracea</i> Benth. & Hook	Brazil		100 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
<i>Duguetia hadrantha</i> R.E. Fr.	Peru	DSmBk		<i>In vitro/Plasmodium falciparum</i>	Inactive	Muhammad et al., 2001
APIACEAE						
<i>Apium graveolens</i> L.	USA	Sd	H ₂ O Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
			CHCl ₃ Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
<i>Conium maculatum</i> L.	Bolivia	DRt	95 % EtOH Ext.	Rat/ <i>Plasmodium vinckei</i>	Active	Munoz et al., 2000
<i>Eryngium foetidum</i> L.	USA	EP	H ₂ O Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Active	Spencer et al., 1947
			CHCl ₃ Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
<i>Eryngium nudicaule</i> Lam.	Bolivia	DAP	95 % EtOH Ext.	<i>In vitro/Plasmodium falciparum</i>	Active	Munoz et al., 2000
				Rat/ <i>Plasmodium vinckei</i>	Active	Munoz et al., 2000
<i>Eryngium yuccaeifolium</i> Michaux	USA	EP	CHCl ₃ Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
			H ₂ O Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Active	Spencer et al., 1947
<i>Pastinaca speciosa</i> L.	Bolivia	DRt	95 % EtOH Ext.	<i>In vitro/Plasmodium falciparum</i>	Active	Munoz et al., 2000
				Rat/ <i>Plasmodium vinckei</i>	Active	Munoz et al., 2000
APOCYNACEAE						
<i>Apocynum cannabinum</i> L.	USA	L + Sm	H ₂ O Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
			CHCl ₃ Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
<i>Aspidosperma nitidum</i> Müll. Arg.	Brazil	EP	*	Duckling/ <i>Plasmodium lophurae</i>	Inactive	Becker, 1949
		DBk	H ₂ O Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Carvalho et al., 1991
		DTBk	Total alkaloids	Mouse/ <i>Plasmodium berghei</i>	Inactive	Banerjee & Lewis, 1954
<i>Aspidosperma oblongum</i> A.D.C.	Guiana		Hexane Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
<i>Aspidosperma olivaceum</i> Müll. Arg.	Brazil	*	Total alkaloids	<i>In vitro/Plasmodium cathemerium</i>	Active	Wasicky et al., 1942
<i>Aspidosperma polyneuron</i> Müll. Arg.	Brazil	DTBk	Total alkaloids	Rat/ <i>Plasmodium vinckei</i>	Active	Munoz et al., 2000
<i>Aspidosperma pyriforme</i> Mart.	Bolivia	DBk	95 % EtOH Ext.	Human adult	Active	Loizaga & Sagastume, 1935
<i>Aspidosperma quebracho-blanco</i> Schltld.	Argentina	DTBk	Total alkaloids	Human adult	Inactive	Domínguez, 1932
<i>Aspidosperma quebracho-blanco</i>	Argentina	DTBk	95 % EtOH Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Active	Spencer et al., 1947
<i>Catharanthus roseus</i> L.	USA	Rt	H ₂ O Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Active	Spencer et al., 1947
			CHCl ₃ Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Active	Spencer et al., 1947
<i>Geissospermum sericeum</i> Benth.	Brazil	DBk	(9:1) MeOH-H ₂ O	<i>In vitro/Plasmodium falciparum</i>	Active	Steele et al., 2002
			H ₂ O Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Carvalho et al., 1991
<i>Geissospermum vellosii</i> Allenão	USA	DSmBk	Decoction	Mouse/ <i>Plasmodium berghei</i>	Active	Brandão et al., 1992
		Wd	H ₂ O Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
			CHCl ₃ Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Active	Spencer et al., 1947
<i>Holarrhena antidyenterica</i> Wall.	USA	L	H ₂ O Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947

Botanical family and scientific names	Country	Part of the plant	Extract of the plant	Organism tested and <i>Plasmodium</i> specie	Results	Reference
<i>Holarthena febrifuga</i> Klotosch	USA	Rt	CHCl ₃ Ext. H ₂ O Ext. CHCl ₃ Ext.	Chicken/ <i>Plasmodium gallinaceum</i> Chicken/ <i>Plasmodium gallinaceum</i> Chicken/ <i>Plasmodium gallinaceum</i>	Inactive Inactive Inactive	Spencer et al., 1947 Spencer et al., 1947 Spencer et al., 1947
<i>Peschiera fuchstaefolia</i> Miers	Brazil	SBk DRtBk	Dichloromethane Ext. Dichloromethane Ext.	<i>In vitro/Plasmodium falciparum</i> <i>In vitro/Plasmodium falciparum</i>	Active Active	Federici et al., 2000 Federici et al., 2000
AQUIFOLIACEAE						
<i>Ilex opaca</i> fa. <i>subintegra</i>	USA	Bk	H ₂ O Ext. H ₂ O Ext. CHCl ₃ Ext.	Chicken/ <i>Plasmodium gallinaceum</i> Duckling/ <i>Plasmodium lophurae</i> Chicken/ <i>Plasmodium gallinaceum</i>	Inactive Inactive Inactive	Spencer et al., 1947 Spencer et al., 1947 Spencer et al., 1947
ARALIACEAE						
<i>Didymopanax vinosum</i> E. March	Brazil	*	95 % EtOH Ext. Hexane Ext.	Mouse/ <i>Plasmodium berghei</i> Mouse/ <i>Plasmodium berghei</i>	Inactive Inactive	Brandão et al., 1985 Brandão et al., 1985
<i>Hedera helix</i> L.	USA	L L + Sm	H ₂ O Ext. CHCl ₃ Ext. H ₂ O Ext. CHCl ₃ Ext. H ₂ O Ext. CHCl ₃ Ext. CHCl ₃ Ext.	Chicken/ <i>Plasmodium gallinaceum</i> Chicken/ <i>Plasmodium gallinaceum</i> Chicken/ <i>Plasmodium gallinaceum</i> Duckling/ <i>Plasmodium lophurae</i> Duckling/ <i>Plasmodium lophurae</i> Duckling/ <i>Plasmodium cathemerium</i> Duckling/ <i>Plasmodium lophurae</i>	Active Inactive Inactive Inactive Inactive Inactive Inactive	Spencer et al., 1947 Spencer et al., 1947 Spencer et al., 1947 Spencer et al., 1947 Spencer et al., 1947 Spencer et al., 1947 Spencer et al., 1947
ARACACEAE						
<i>Euterpe precatoria</i> Mart.	Peru	DRt	Ethyl acetate fraction	<i>In vitro/Plasmodium falciparum</i>	Active	Jensen et al., 2002
ARACEAE						
<i>Monstera deliciosa</i> Liebm.	Brazil	*	95 % EtOH Ext. Hexane Ext.	Mouse/ <i>Plasmodium berghei</i> Mouse/ <i>Plasmodium berghei</i>	Inactive Inactive	Brandão et al., 1985 Brandão et al., 1985
ARAUCARIACEAE						
<i>Araucaria angustifolia</i> O. Kuntze	Brazil	*	Benzene Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
ARISTOLOCHIACEAE						
<i>Aristolochia acuminata</i> Lam.	USA	Rt	H ₂ O Ext. CHCl ₃ Ext.	Chicken/ <i>Plasmodium gallinaceum</i> Chicken/ <i>Plasmodium gallinaceum</i>	Inactive Inactive	Spencer et al., 1947 Spencer et al., 1947
<i>Aristolochia prostrata</i> Duchartre	Bolivia	DAP	95 % EtOH Ext.	Rat/ <i>Plasmodium vinckei</i>	Active	Munoz et al., 2000
<i>Aristolochia triangularis</i> Cham.	USA	Sm	H ₂ O Ext. CHCl ₃ Ext.	Chicken/ <i>Plasmodium gallinaceum</i> Chicken/ <i>Plasmodium gallinaceum</i>	Inactive Inactive	Spencer et al., 1947 Spencer et al., 1947
<i>Aristolochia trilobata</i> L.	USA	Sm	CHCl ₃ Ext. H ₂ O Ext. H ₂ O Ext.	Chicken/ <i>Plasmodium gallinaceum</i> Chicken/ <i>Plasmodium gallinaceum</i> Duckling/ <i>Plasmodium cathemerium</i>	Inactive Inactive Inactive	Spencer et al., 1947 Spencer et al., 1947 Spencer et al., 1947
ASTERACEAE						
<i>Acanthospermum australe</i> Kuntze	Brazil	DEP	H ₂ O Ext. Decoction H ₂ O Ext.	Mouse/ <i>Plasmodium berghei</i> Mouse/ <i>Plasmodium berghei</i> <i>In vitro/Plasmodium falciparum</i>	Active Active Active	Carvalho & Krettli, 1991 Brandão et al., 1992 Carvalho & Krettli, 1991

Botanical family and scientific names	Country	Part of the plant	Extract of the plant	Organism tested and <i>Plasmodium</i> specie	Results	Reference
<i>Acanthospermum xanthoides</i> DC.	USA	EP	H ₂ O Ext. H ₂ O Ext. H ₂ O Ext.	Mouse/ <i>Plasmodium berghei</i> <i>In vitro/Plasmodium falciparum</i> Chicken/ <i>Plasmodium gallinaceum</i>	Active Active Inactive	Carvalho et al., 1991 Carvalho et al., 1991 Spencer et al., 1947
<i>Achillea millefolium</i> L.	USA	AP	CHCl ₃ Ext. H ₂ O Ext.	Chicken/ <i>Plasmodium gallinaceum</i> Chicken/ <i>Plasmodium gallinaceum</i>	Inactive Inactive	Spencer et al., 1947 Spencer et al., 1947
<i>Achyrocline alata</i> (Kunth)	Brazil	DEP	CHCl ₃ Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Active	Spencer et al., 1947
<i>Achyrocline saturoideoides</i> Lam.	Brazil	DEP	EtOAc Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
<i>Alomia fastigiata</i> Benth.	Brazil	DEP	EtOAc Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
<i>Ambrosia polystachya</i> DC.	Brazil	DRt	95 % EtOH Ext. Hexane Ext.	Mouse/ <i>Plasmodium berghei</i> Mouse/ <i>Plasmodium berghei</i>	Inactive Inactive	Brandão et al., 1985 Brandão et al., 1985
<i>Ambrosia species</i> L.	Brazil	DEP	95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
<i>Antennaria linearifolia</i> Wedd.	Bolivia	DEP	Hexane Ext. 95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i> <i>In vitro/Plasmodium falciparum</i>	Inactive Active	Carvalho et al., 1991 Munoz et al., 2000
<i>Arcitum minus</i> Bernh.	Brazil	DEP	CHCl ₃ Ext.	Rat/ <i>Plasmodium vinckei</i>	Inactive	Munoz et al., 2000
<i>Artemisia absinthium</i> L.	Cuba	DEP	H ₂ O Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
<i>Artemisia ludoviciana</i> Keck	Mexico	DEP	Sesquiterpene fraction	<i>In vitro/Plasmodium falciparum</i>	Inactive	Hernandez et al., 1990
<i>Artemisia vulgaris</i> L.	Cuba	DEP	95 % EtOH Ext.	<i>In vitro/Plasmodium falciparum</i>	Active	Hernandez et al., 1990
<i>Aspilia squarrosa</i> Baker	Brazil	DEP	H ₂ O Ext.	Mouse/ <i>Plasmodium yoelii</i>	Active	Malagon et al., 1997
<i>Aster</i> spp	Brazil	DEP	95 % EtOH Ext. H ₂ O Ext.	<i>In vitro/Plasmodium falciparum</i> Mouse/ <i>Plasmodium berghei</i>	Inactive Inactive	Hernandez et al., 1990 Brandão et al., 1985
<i>Baccharis anomala</i> DC.	Brazil	DEP	95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
<i>Baccharis brachylaenoides</i> DC.	Brazil	DEP	Hexane Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
<i>Baccharis dracunculifolia</i> DC.	Brazil	DEP	MeOH Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
<i>Baccharis gaudichaudiana</i> DC.	Brazil	DEP	95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
<i>Baccharis genistelloides</i> (Lam.) Pers	Brazil	* DL	Total alkaloids 95 % EtOH Ext.	<i>In vitro/Plasmodium cathemerium</i> <i>In vitro/Plasmodium falciparum</i>	Active Active	Wasicky et al., 1942 Munoz et al., 2000
<i>Baccharis helichrysoides</i> DC.	USA	EP	H ₂ O Ext. CHCl ₃ Ext.	Rat/ <i>Plasmodium vinckei</i> Chicken/ <i>Plasmodium gallinaceum</i>	Active Inactive	Munoz et al., 2000 Spencer et al., 1947
<i>Baccharis myrioc</i>	Brazil	DEP	Hexane Ext. 95 % EtOH Ext. EtOAc Ext. 95 % EtOH Ext. Hexane Ext.	Chicken/ <i>Plasmodium gallinaceum</i> Mouse/ <i>Plasmodium berghei</i> Mouse/ <i>Plasmodium berghei</i> Mouse/ <i>Plasmodium berghei</i> Mouse/ <i>Plasmodium berghei</i> Mouse/ <i>Plasmodium berghei</i>	Inactive Inactive Inactive Inactive Inactive Inactive	Spencer et al., 1947 Carvalho et al., 1991 Carvalho et al., 1991 Carvalho et al., 1991 Brandão et al., 1985 Brandão et al., 1985

Botanical family and scientific names	Country	Part of the plant	Extract of the plant	Organism tested and <i>Plasmodium</i> specie	Results	Reference
<i>Baccharis oxyodonta</i> DC.	Brazil	DEP	95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
<i>Baccharis pauciflosculosa</i> DC.	Brazil	DEP	Hexane Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
			95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
			Hexane Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
<i>Baccharis rufescens</i> Spreng.	Bolivia	DL	95 % EtOH Ext.	Rat/ <i>Plasmodium vinckei</i>	Active	Munoz et al., 2000
<i>Baccharis schultzii</i> Baker	Brazil	DEP	Hexane Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
<i>Baccharis semisserrata</i> DC.	Brazil	DEP	95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
			Hexane Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
<i>Baccharis</i> species	Brazil	DEP	Hexane Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
			EtOAc Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Carvalho et al., 1991
			Hexane Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Carvalho et al., 1991
<i>Baccharis tarchonathoides</i> DC	Brazil	DEP	95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Carvalho et al., 1991
<i>Baccharis trimera</i> (Less.) DC.	Brazil	DEP	Hexane Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Carvalho et al., 1991
			95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Carvalho et al., 1991
			Hexane Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Carvalho et al., 1991
<i>Bidens bipinnata</i> L.	Brazil	DEP	Hexane Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
<i>Bidens biternata</i> Merr. & Sherref.	Brazil	DEP	90 % EtOH Ext.	<i>In vitro/Plasmodium falciparum</i>	Active	Brandão et al., 2001
<i>Bidens campylothecha</i> Schultz-Bip.	Brazil	DEP	90 % EtOH Ext.	<i>In vitro/Plasmodium falciparum</i>	Active	Brandão et al., 2001
<i>Bidens ferulaefolia</i> DC.	Brazil	DEP	90 % EtOH Ext.	<i>In vitro/Plasmodium falciparum</i>	Active	Brandão et al., 2001
<i>Bidens frondosa</i> L.	Brazil	DEP	90 % EtOH Ext.	<i>In vitro/Plasmodium falciparum</i>	Active	Brandão et al., 2001
<i>Bidens maximowicziana</i> Oett.	Brazil	DEP	90 % EtOH Ext.	<i>In vitro/Plasmodium falciparum</i>	Active	Brandão et al., 2001
<i>Bidens parviflora</i> Willd.	Brazil	DEP	90 % EtOH Ext.	<i>In vitro/Plasmodium falciparum</i>	Inactive	Brandão et al., 2001
<i>Bidens pilosa</i> L.	Brazil	DEP	90 % EtOH Ext.	<i>In vitro/Plasmodium falciparum</i>	Active	Brandão et al., 2001
			EtOAc Ext.	<i>In vitro/Plasmodium falciparum</i>	Active	Kretli et al., 2001a,b
			Butanol Ext.	<i>In vitro/Plasmodium falciparum</i>	Active	Kretli et al., 2001a,b
			100 % EtOH Ext.	<i>In vitro/Plasmodium falciparum</i>	Inactive	Kretli et al., 2001a,b
			CHCl ₃ Ext.	Mouse/ <i>Plasmodium falciparum</i>	Inactive	Kretli et al., 2001a,b
			95 % EtOH Ext.	Mouse/ <i>Plasmodium falciparum</i>	Inactive	Kretli et al., 2001a,b
			CHCl ₃ Ext.	<i>In vitro/Plasmodium falciparum</i>	Active	Brandão et al., 2001
			Ether Ext.	<i>In vitro/Plasmodium falciparum</i>	Inactive	Brandão et al., 2001
			Butanol Ext.	<i>In vitro/Plasmodium falciparum</i>	Inactive	Brandão et al., 2001
			Ether Ext.	<i>In vitro/Plasmodium falciparum</i>	Active	Brandão et al., 2001
			100 % EtOH Ext.	<i>In vitro/Plasmodium falciparum</i>	Inactive	Brandão et al., 2001
			Butanol Ext.	<i>In vitro/Plasmodium falciparum</i>	Active	Kretli et al., 2001a,b
			CHCl ₃ Ext.	<i>In vitro/Plasmodium falciparum</i>	Active	Kretli et al., 2001a,b
			H ₂ O Ext.	<i>In vitro/Plasmodium falciparum</i>	Active	Kretli et al., 2001a,b
			100 % EtOH Ext.	Mouse/ <i>Plasmodium falciparum</i>	Inactive	Kretli et al., 2001a,b
			80 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i>	Active	Oliveira et al., 2004
			Butanol Ext.	<i>In vitro/Plasmodium falciparum</i>	Active	Brandão et al., 2001

Botanical family and scientific names	Country	Part of the plant	Extract of the plant	Organism tested and <i>Plasmodium</i> specie	Results	Reference
			Ether Ext.	<i>In vitro/Plasmodium falciparum</i>	Inactive	Brandão et al., 2001
			95 % EtOH Ext.	<i>In vitro/Plasmodium falciparum</i>	Active	Brandão et al., 2001
			CHCl ₃ Ext.	<i>In vitro/Plasmodium falciparum</i>	Inactive	Brandão et al., 2001
			Ether Ext.	<i>In vitro/Plasmodium falciparum</i>	Inactive	Krettli et al., 2001a,b
			100 % EtOH Ext.	<i>In vitro/Plasmodium falciparum</i>	Active	Krettli et al., 2001a,b
			Butanol Ext.	<i>In vitro/Plasmodium falciparum</i>	Active	Krettli et al., 2001a,b
			CHCl ₃ Ext.	<i>In vitro/Plasmodium falciparum</i>	Active	Krettli et al., 2001a,b
			Butanol Ext.	Mouse/ <i>Plasmodium falciparum</i>	Inactive	Krettli et al., 2001a,b
		D5m	Ether Ext.	<i>In vitro/Plasmodium falciparum</i>	Active	Brandão et al., 2001
			CHCl ₃ Ext.	<i>In vitro/Plasmodium falciparum</i>	Active	Brandão et al., 2001
			Ether Ext.	<i>In vitro/Plasmodium falciparum</i>	Inactive	Krettli et al., 2001a,b
			CHCl ₃ Ext.	<i>In vitro/Plasmodium falciparum</i>	Active	Krettli et al., 2001a,b
			100 % EtOH Ext.	Mouse/ <i>Plasmodium falciparum</i>	Active	Krettli et al., 2001a,b
			CHCl ₃ Ext.	Mouse/ <i>Plasmodium falciparum</i>	Inactive	Krettli et al., 2001a,b
			Ether Ext.	<i>In vitro/Plasmodium falciparum</i>	Inactive	Brandão et al., 2001
<i>Bidens segetum</i> Mart. ex Colla	Brazil	DEP	95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
<i>Bidens tripartita</i> L.	Brazil	DEP	90 % EtOH Ext.	<i>In vitro/Plasmodium falciparum</i>	Active	Brandão et al., 2001
<i>Calea lantanoides</i> Gardner	Brazil	DEP	95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i>	Equivocal	Brandão et al., 1985
			95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
<i>Calea serrata</i> Less.	Brazil	DEP	Hexane Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
			95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
<i>Calea</i> species	Brazil	DEP	Hexane Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
			95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Carvalho et al., 1991
<i>Calea teucrifolia</i> Baker	Brazil	DEP	EtOAc Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Carvalho et al., 1991
			Hexane Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Carvalho et al., 1991
			95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Carvalho et al., 1991
<i>Chaptalia nutans</i> (L.) Polak.	Brazil	DEP	EtOAc Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Carvalho et al., 1991
<i>Chauquiraga fodinarum</i> Baker	Brazil	DEP	95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
<i>Chauquiraga glabra</i> (Spreng.) Baker	Brazil	DEP	95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
			MeOH Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
<i>Chauquiraga vagans</i> (Gardner) Baker	Brazil	DEP	EtOAc Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
			MeOH Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
<i>Clitidium armanii</i> O.E. Schulz	Brazil	DEP	Hexane Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
<i>Conyza filaginoides</i> (DC.) Hieron	USA	EP	95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
<i>Dasyphyllum brasiliensis</i> Cabr.	Brazil	D5m	Exudate	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
			H ₂ O Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Active	Spencer et al., 1947
			CHCl ₃ Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
			EtOAc Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985

Botanical family and scientific names	Country	Part of the plant	Extract of the plant	Organism tested and <i>Plasmodium</i> specie	Results	Reference
<i>Dasyphyllum</i> spp	Brazil	DL	95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
<i>Dasyphyllum synacantium</i> Cabrera	Brazil	DBh DEP	95 % EtOH Ext. EtOAc Ext.	Mouse/ <i>Plasmodium berghei</i> Mouse/ <i>Plasmodium berghei</i>	Inactive Inactive	Carvalho et al., 1991 Brandão et al., 1985
<i>Elephantopus angustifolius</i> Sw.	Brazil	DEP	95 % EtOH Ext. Hexane Ext.	Mouse/ <i>Plasmodium berghei</i> Mouse/ <i>Plasmodium berghei</i>	Inactive Inactive	Brandão et al., 1985 Brandão et al., 1985
<i>Erechtites valerianaeifolia</i> DC.	Brazil	*	95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
<i>Eremanthus glomerulatus</i> Less.	Brazil	DRt	EtOAc Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
<i>Eremanthus goyazensis</i> Sch. Bip.	Brazil	DEP	EtOAc Ext. Hexane Ext.	Mouse/ <i>Plasmodium berghei</i> Mouse/ <i>Plasmodium berghei</i>	Inactive Inactive	Brandão et al., 1985 Brandão et al., 1985
<i>Eremanthus incanus</i> Less.	Brazil	DEP	95 % EtOH Ext. 95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i> Mouse/ <i>Plasmodium berghei</i>	Inactive Inactive	Brandão et al., 1985 Brandão et al., 1985
<i>Eremanthus mollis</i> Sch. Bip.	Brazil	DEP	CHCl ₃ Ext. Hexane Ext.	Mouse/ <i>Plasmodium berghei</i> Mouse/ <i>Plasmodium berghei</i>	Inactive Inactive	Brandão et al., 1985 Brandão et al., 1985
<i>Eremanthus scapigerus</i> (DC.) Baker	Brazil	DEP DEP DEP DEP	EtOAc Ext. 95 % EtOH Ext. Hexane Ext. 95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i> Mouse/ <i>Plasmodium berghei</i> Mouse/ <i>Plasmodium berghei</i> Mouse/ <i>Plasmodium berghei</i>	Inactive Inactive Inactive Inactive	Brandão et al., 1985 Brandão et al., 1985 Brandão et al., 1985 Brandão et al., 1985
<i>Eremanthus sphaerocephalus</i> Baker	Brazil	DEP	Hexane Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
<i>Erigeron maximus</i> (D. Don) DC.	Brazil	DEP	95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
<i>Eupatorium christieanum</i> Baker	Argentina	DAP	Hexane Ext. H ₂ O Ext.	Mouse/ <i>Plasmodium berghei</i> <i>In vitro/Plasmodium falciparum</i>	Inactive Active	Brandão et al., 1985 Debenedetti et al., 2002
<i>Eupatorium gaudichaudianum</i> DC.	Brazil	DEP	MeOH Ext. 95 % EtOH Ext. Hexane Ext.	<i>In vitro/Plasmodium falciparum</i> Mouse/ <i>Plasmodium berghei</i> Mouse/ <i>Plasmodium berghei</i>	Active Active Inactive	Debenedetti et al., 2002 Debenedetti et al., 2002 Brandão et al., 1985
<i>Eupatorium hecatanthum</i> Baker	Argentina	DAP	EtOAc Ext. H ₂ O Ext.	Mouse/ <i>Plasmodium berghei</i> <i>In vitro/Plasmodium falciparum</i>	Inactive Active	Carvalho et al., 1991 Carvalho et al., 1991
<i>Eupatorium intermedium</i> DC.	Brazil	DEP	MeOH Ext. 95 % EtOH Ext. Hexane Ext.	<i>In vitro/Plasmodium falciparum</i> Mouse/ <i>Plasmodium berghei</i> Mouse/ <i>Plasmodium berghei</i>	Active Active Inactive	Debenedetti et al., 2002 Debenedetti et al., 2002 Brandão et al., 1985
<i>Eupatorium inulaefolium</i> Kunth	Colombia	DL + Sm	MeOH Ext. CH ₂ Cl ₂ Ext.	<i>In vitro/Plasmodium falciparum</i> <i>In vitro/Plasmodium falciparum</i>	Inactive Active	Brandão et al., 1985 Blair et al., 2002
<i>Eupatorium itatayense</i> Hieron	Brazil	DEP	(1:1) EtOH-H ₂ O Ext. 95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i> Mouse/ <i>Plasmodium berghei</i>	Inactive Inactive	Blair et al., 2002 Brandão et al., 1985
<i>Eupatorium laevigatum</i> Lam.	Brazil	DEP	95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
<i>Eupatorium parviflorum</i> Aubl.	Brazil	DEP	Hexane Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Carvalho et al., 1991
<i>Eupatorium rotundifolium</i> L.	USA	EP	95 % EtOH Ext. H ₂ O Ext. CHCl ₃ Ext.	Mouse/ <i>Plasmodium berghei</i> Chicken/ <i>Plasmodium gallinaceum</i> Chicken/ <i>Plasmodium gallinaceum</i>	Inactive Inactive Active	Carvalho et al., 1991 Spencer et al., 1947 Spencer et al., 1947

Botanical family and scientific names	Country	Part of the plant	Extract of the plant	Organism tested and <i>Plasmodium</i> specie	Results	Reference
<i>Eupatorium species</i> Locock R.A.	Brazil	DEP	EtOAc Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Carvalho et al., 1991
<i>Eupatorium squavidum</i> DC.	Brazil	DEP	95 % EtOH Ext. Hexane Ext. 95 % EtOH Ext. Hexane Ext.	Mouse/ <i>Plasmodium berghei</i> Mouse/ <i>Plasmodium berghei</i> Mouse/ <i>Plasmodium berghei</i> <i>In vitro/Plasmodium falciparum</i>	Inactive Active Inactive Inactive	Carvalho et al., 1991 Carvalho & Krettli, 1991 Carvalho et al., 1991 Carvalho & Krettli, 1991
<i>Eupatorium subhastatum</i> Hook. Arn	Argentina	DAP	Hexane Ext. Hexane Ext. Hexane Ext.	Mouse/ <i>Plasmodium berghei</i> Mouse/ <i>Plasmodium berghei</i> <i>In vitro/Plasmodium falciparum</i>	Inactive Active Active	Brandão et al., 1985 Carvalho et al., 1991 Carvalho et al., 1991
<i>Eupatorium vauhierianum</i> DC.	Brazil	DEP	Hexane Ext. H ₂ O Ext. MeOH Ext.	<i>In vitro/Plasmodium falciparum</i> <i>In vitro/Plasmodium falciparum</i> <i>In vitro/Plasmodium falciparum</i>	Active Active Active	Debenedetti et al., 2002 Debenedetti et al., 2002 Debenedetti et al., 2002
<i>Gamochaeta simplicicaulis</i> Cabrera	Brazil	DAP	EtOAc Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
<i>Gochnatia barrosii</i> Cabrera	Argentina	DAP	H ₂ O Ext.	<i>In vitro/Plasmodium falciparum</i>	Active	Debenedetti et al., 2002
<i>Gochnatia paniculata</i> Cabrera	Brazil	DEP	EtOAc Ext. Hexane Ext. 95 % EtOH Ext. EtOAc Ext.	Mouse/ <i>Plasmodium berghei</i> Mouse/ <i>Plasmodium berghei</i> Mouse/ <i>Plasmodium berghei</i> Mouse/ <i>Plasmodium berghei</i>	Inactive Inactive Inactive Inactive	Brandão et al., 1985 Brandão et al., 1985 Carvalho et al., 1991 Carvalho et al., 1991
<i>Gochnatia polymorpha</i> Cabrera	Brazil	DEP	EtOAc Ext. Hexane Ext. 95 % EtOH Ext. EtOAc Ext.	Mouse/ <i>Plasmodium berghei</i> Mouse/ <i>Plasmodium berghei</i> Mouse/ <i>Plasmodium berghei</i> Mouse/ <i>Plasmodium berghei</i>	Inactive Inactive Inactive Inactive	Brandão et al., 1985 Brandão et al., 1985 Carvalho et al., 1991 Carvalho et al., 1991
<i>Gochnatia polymorpha</i> Cabrera	Brazil	DFI + L	Hexane Ext. 95 % EtOH Ext. EtOAc Ext.	Mouse/ <i>Plasmodium berghei</i> Mouse/ <i>Plasmodium berghei</i> Mouse/ <i>Plasmodium berghei</i>	Inactive Inactive Inactive	Brandão et al., 1985 Brandão et al., 1985 Carvalho et al., 1991
<i>Gochnatia polymorpha</i> Cabrera	Brazil	DEP	Hexane Ext. 95 % EtOH Ext. EtOAc Ext.	Mouse/ <i>Plasmodium berghei</i> Mouse/ <i>Plasmodium berghei</i> Mouse/ <i>Plasmodium berghei</i>	Inactive Inactive Inactive	Brandão et al., 1985 Brandão et al., 1985 Carvalho et al., 1991
<i>Gochnatia velutina</i> (Bong.) Cabrera	Brazil	DEP	Hexane Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
<i>Heterocoma albida</i> DC.	Brazil	DEP	EtOAc Ext. Hexane Ext. 95 % EtOH Ext. CHCl ₃ Ext. Hexane Ext.	Mouse/ <i>Plasmodium berghei</i> Mouse/ <i>Plasmodium berghei</i> Mouse/ <i>Plasmodium berghei</i> Mouse/ <i>Plasmodium berghei</i> Mouse/ <i>Plasmodium berghei</i>	Inactive Inactive Inactive Inactive Inactive	Brandão et al., 1985 Brandão et al., 1985 Brandão et al., 1985 Brandão et al., 1985 Brandão et al., 1985
<i>Isostigma peucedanifolium</i> Less.	Brazil	DEP	95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
<i>Jaegeria hirta</i> (Lag.) Less.	Brazil	DEP	CHCl ₃ Ext. Hexane Ext.	Mouse/ <i>Plasmodium berghei</i> Mouse/ <i>Plasmodium berghei</i>	Inactive Inactive	Brandão et al., 1985 Brandão et al., 1985
<i>Lucilia recurva</i> Wedd.	Bolivia	DL	95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
<i>Lychnophora brunioideis</i> Mart.	Brazil	DSm	95 % EtOH Ext.	Rat/ <i>Plasmodium vivax</i>	Inactive	Munoz et al., 2000
			Hexane Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
			Hexane Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985

Botanical family and scientific names	Country	Part of the plant	Extract of the plant	Organism tested and <i>Plasmodium</i> specie	Results	Reference
<i>Melampodium camphoratum</i> Baker	Surinam	DL+ Sm	95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
<i>Mikania hirsutissima</i> DC.	Brazil	DEP	EtOAc Ext.	<i>In vitro</i> / <i>Plasmodium falciparum</i>	Inactive	Chaturvedula et al., 2004
<i>Mikania schenckii</i> Hieron.	Brazil	DEP	Hexane Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
<i>Mikania subverticillata</i> Sch.Bip.	Brazil	DEP	95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
<i>Mutisia acuminata</i> Ruiz et Pavon	Bolivia	DL	CHCl ₃ Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
<i>Neurolaena lobata</i> (L.) R. Br.	Guatemala	DAP	95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
		DAP	95 % EtOH Ext.	<i>In vitro</i> / <i>Plasmodium falciparum</i>	Active	Munoz et al., 2000
		DL	CH ₂ Cl ₂ Ext.	Rat/ <i>Plasmodium vinckei</i>	Active	Munoz et al., 2000
			MeOH Ext.	<i>In vitro</i> / <i>Plasmodium falciparum</i>	Active	Francois et al., 1996
			H ₂ O soluble fraction	<i>In vitro</i> / <i>Plasmodium falciparum</i>	Active	Francois et al., 1996
			MeOH Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Franssen et al., 1997
			CH ₂ Cl ₂ Ext.	Mouse/ <i>Plasmodium berghei</i>	Active	Franssen et al., 1997
<i>Piptocarpha oblonga</i> Baker	Brazil	DEP	EtOAc Ext.	<i>In vitro</i> / <i>Plasmodium falciparum</i>	Active	Franssen et al., 1997
<i>Piptocarpha rotundifolia</i> Baker	Brazil	DEP	EtOAc Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
<i>Piqueria trinervia</i> Cav.	USA	Sm	EtOAc Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
<i>Pluchea odorata</i> (L.) Cass.	USA	EP	H ₂ O Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
			CHCl ₃ Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
<i>Pollalesta discolor</i> (Kunth) Aristeg.	Colombia	DBk	95 % EtOH Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
<i>Pseudogymoxys pohitii</i> Baker	Brazil	DEP	95 % EtOH Ext.	<i>In vitro</i> / <i>Plasmodium falciparum</i>	Active	Mess et al., 1998
<i>Schkuhria pinnata</i> Kuntze ex Thell.	Bolivia	DEP	Hexane Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
<i>Senecio adamantium</i> Bong.	Brazil	DEP	95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
			EtOAc Ext.	Rat/ <i>Plasmodium vinckei</i>	Active	Munoz et al., 2000
			Hexane Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Carvalho et al., 1991
			95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Carvalho et al., 1991
<i>Senecio brasiliensis</i> Less.	Brazil	DEP	EtOAc Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Carvalho et al., 1991
			95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
			Hexane Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
<i>Stevia decussata</i> Baker	Bolivia	DL	95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
	Brazil	DEP	95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i>	Active	Munoz et al., 2000
			Hexane Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
<i>Stevia menthaefolia</i> Phil.	Brazil	DEP	95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
<i>Stevia</i> species	Brazil	DRt	Hexane Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
			CHCl ₃ Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Carvalho et al., 1991
			95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Carvalho et al., 1991
<i>Symphypappus compressus</i> Gardner	Brazil	DEP	95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
			Hexane Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985

Botanical family and scientific names	Country	Part of the plant	Extract of the plant	Organism tested and <i>Plasmodium</i> specie	Results	Reference
<i>Symphopappus cuneatus</i> Baker	Brazil	DEP	95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
<i>Tagetes graveolens</i> L'Herit ex DC	Bolivia	DAP	Hexane Ext. 95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i> <i>In vitro/Plasmodium falciparum</i>	Inactive Active	Brandão et al., 1985 Munoz et al., 2000
<i>Tagetes minuta</i> L.	Brazil	DEP	95 % EtOH Ext.	Rat/ <i>Plasmodium vinckei</i>	Inactive	Munoz et al., 2000
<i>Tagetes pusilla</i> Kunth.	Bolivia	DAP	Hexane Ext. 95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i> <i>In vitro/Plasmodium berghei</i>	Inactive Active	Brandão et al., 1985 Brandão et al., 1985
<i>Trichogonia gardneri</i> A. Gray	Brazil	DEP	95 % EtOH Ext.	Rat/ <i>Plasmodium vinckei</i>	Active	Munoz et al., 2000
<i>Trixis grisebachii</i> Kuntze	Bolivia	DAP	95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Carvalho et al., 1991
<i>Vernonia brasilitiana</i> (L.) Druce	Brazil	DL	95 % EtOH Ext. Hexane Ext.	<i>In vitro/Plasmodium falciparum</i> Rat/ <i>Plasmodium vinckei</i>	Active Active	Munoz et al., 2000 Munoz et al., 2000
<i>Vernonia brasiliensis</i> (Spreng.) Less.	Brazil	DAP	Hexane Ext. Hexane Ext. Hexane Ext. Hexane Ext. CHCl ₃ Ext. 95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i> Mouse/ <i>Plasmodium berghei</i> <i>In vitro/Plasmodium falciparum</i> <i>In vitro/Plasmodium falciparum</i> Mouse/ <i>Plasmodium berghei</i> Mouse/ <i>Plasmodium berghei</i> Mouse/ <i>Plasmodium berghei</i>	Active Active Inactive Active Active Inactive Inactive	Carvalho & Krettl, 1991 De Almeida et al., 1997 Carvalho & Krettl, 1991 De Almeida et al., 1997 Carvalho et al., 1991 Carvalho et al., 1991 Carvalho et al., 1991
<i>Vernonia cognata</i> Less.	Brazil	DEP	EtOAc Ext. 95 % EtOH Ext.	<i>In vitro/Plasmodium falciparum</i> <i>In vitro/Plasmodium falciparum</i>	Inactive Active	Carvalho et al., 1991 Carvalho et al., 1991
<i>Vernonia condensata</i> Baker	Brazil	DEP	Hexane Ext. EtOAc Ext.	Mouse/ <i>Plasmodium berghei</i> Mouse/ <i>Plasmodium berghei</i>	Inactive Inactive	Brandão et al., 1985 Brandão et al., 1985
<i>Vernonia diffusa</i> Less.	Brazil	DEP	95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
<i>Vernonia discolor</i> (Spreng.) Less.	Brazil	DEP	Hexane Ext. 95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i> Mouse/ <i>Plasmodium berghei</i>	Inactive Inactive	Brandão et al., 1985 Brandão et al., 1985
<i>Vernonia disfolia</i>	Brazil	DEP	EtOAc Ext. EtOAc Ext.	Mouse/ <i>Plasmodium berghei</i> Mouse/ <i>Plasmodium berghei</i>	Inactive Inactive	Carvalho et al., 1991 Brandão et al., 1985
<i>Vernonia elegans</i> Gardner	Brazil	DEP	95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
<i>Vernonia ferruginea</i> Less.	Brazil	DEP	Hexane Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
<i>Vernonia florida</i> Gardner	Brazil	DEP	95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
<i>Vernonia fruticosa</i> (L.)	Brazil	DEP	95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
<i>Vernonia herbacea</i> (Vell.) Rusby	Brazil	DEP	Hexane Ext. EtOAc Ext.	Mouse/ <i>Plasmodium berghei</i> Mouse/ <i>Plasmodium berghei</i>	Inactive Inactive	Brandão et al., 1985 Brandão et al., 1985
<i>Vernonia macrophylla</i> Less.	Brazil	DEP	Hexane Ext. 95 % EtOH Ext. Hexane Ext.	Mouse/ <i>Plasmodium berghei</i> Mouse/ <i>Plasmodium berghei</i> Mouse/ <i>Plasmodium berghei</i>	Inactive Inactive Inactive	Brandão et al., 1985 Brandão et al., 1985 Brandão et al., 1985

Botanical family and scientific names	Country	Part of the plant	Extract of the plant	Organism tested and <i>Plasmodium</i> specie	Results	Reference
<i>Vernonia mucronulata</i> Less.	Brazil	DEP	95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
<i>Vernonia pedunculata</i> DC.	Brazil	DEP	95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
<i>Vernonia polyanthes</i> Less.	Brazil	DEP	Hexane Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
		DEP	EtOAc Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
		DEP	95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
		DEP	Hexane Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
<i>Vernonia salzmannii</i> DC.	Brazil	DEP	Hexane Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
		DFI	95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
		DRt	Hexane Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
<i>Vernonia scabra</i> Pers.	Brazil	DRt	Hexane Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
			CHCl ₃ Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
<i>Vernonia scorpioides</i> (Lam.) Pers.	Brazil	DEP	95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
<i>Vernonia westiniana</i> Less.	Brazil	DL	95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
		DRt	Hexane Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
<i>Viguiera robusta</i> Gardner	Brazil	DRt	95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
			EtOAc Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
<i>Wulffia baccata</i> (L.) Kuntze	Brazil	DEP	Hexane Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
<i>Wunderlichia mirabilis</i> Riedel	Brazil	DEP	95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
			Hexane Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
			95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
			CHCl ₃ Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
BERBERIDACEAE						
<i>Berberis chrysacantha</i> C.K.Schneid.	Bolivia	DL	95 % EtOH Ext.	<i>In vitro/Plasmodium falciparum</i>	Active	Munoz et al., 2000
<i>Berberis flexuosa</i> Ruiz. & Pavon.	Argentina	Rt	Total alkaloids	Rat/ <i>Plasmodium vivax</i>	Active	Munoz et al., 2000
BIGNONIACEAE						
<i>Tabebuia ochracea</i> Gentry	Colombia	DSmBk	CHCl ₃ Ext.	Human adult	Active	Loizaga & Sagastume, 1935
BIXACEAE						
<i>Bixa orellana</i> L.	Brazil	DSd	95 % EtOH Ext.	<i>In vitro/Plasmodium berghei</i>	Inactive	Diaz, Medina, 1996
		DSd	CHCl ₃ Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
			Hexane Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
		Sd	CHCl ₃ Ext.	Duckling/ <i>Plasmodium lophurae</i>	Inactive	Spencer et al., 1947
	USA		CHCl ₃ Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
			CHCl ₃ Ext.	Duckling/ <i>Plasmodium cathemerium</i>	Inactive	Spencer et al., 1947

Botanical family and scientific names	Country	Part of the plant	Extract of the plant	Organism tested and <i>Plasmodium</i> specie	Results	Reference
BOLETACEAE						
<i>Boletus queletii</i> Schulzer	USA	DFr	H ₂ O Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
BORAGINACEAE						
<i>Bourreria succulenta</i> Jacq.	Puerto rico	DSm	95 % EtOH Ext.	<i>In vitro/Plasmodium falciparum</i>	Inactive	Antoun et al., 1993
<i>Leccinum aurantiacum</i> (Bull.) Gray	USA	DFr	*	<i>In vitro/Plasmodium falciparum</i>	Active	Antoun et al., 1993
			100 % EtOH Ext.	<i>In vitro/Plasmodium falciparum</i>	Active	Lovy et al., 1999
			H ₂ O Ext.	<i>In vitro/Plasmodium falciparum</i>	Active	Lovy et al., 1999
BOMBACACEAE						
<i>Adansonia digitata</i> Linn.	USA	Bk	H ₂ O Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
<i>Cavanillesia platanifolia</i> Kunth.	Panama	DSmBk	CHCl ₃ Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
<i>Ceiba pentandra</i> (L.) Gaertn.	Puerto Rico	DSm	MeOH Ext.	<i>In vitro/Plasmodium falciparum</i>	Active	Calderon et al., 2000
			95 % EtOH Ext.	<i>In vitro/Plasmodium falciparum</i>	Active	Antoun et al., 1993
				<i>In vitro/Plasmodium falciparum</i>	Inactive	Antoun et al., 1993
BORAGINACEAE						
<i>Borago officinalis</i> L.	USA	DFI	H ₂ O Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
<i>Cordia corymbosa</i> G. Don	Brazil	*	CHCl ₃ Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
			95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
<i>Cordia polycephala</i> Johnst.	Puerto rico	DL	Hexane Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
<i>Cordia species</i> L.	Brazil	*	95 % EtOH Ext.	<i>In vitro/Plasmodium falciparum</i>	Active	Antoun et al., 2001
			EtOAc Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
BRASSICACEAE						
<i>Brassica campestris</i> L.	Brazil	DEP	95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
BUDDLEJACEAE						
<i>Buddleja brasiliensis</i> Sprengel	Brazil	*	95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
<i>Buddleja globosa</i> Hope	Argentina	DAP	H ₂ O Ext.	<i>In vitro/Plasmodium falciparum</i>	Active	Debenedetti et al., 2002
<i>Buddleja tucumanensis</i> Griseb.	Argentina	DAP	MeOH Ext.	<i>In vitro/Plasmodium falciparum</i>	Active	Debenedetti et al., 2002
BURSERACEAE						
<i>Protium glabrescens</i> Swart	Bolivia	DBk	95 % EtOH Ext.	<i>In vitro/Plasmodium falciparum</i>	Inactive	Deharo et al., 2001
				<i>In vitro/Plasmodium berghei</i>	Inactive	Deharo et al., 2001
				<i>In vivo/Plasmodium berghei</i>	Active	Deharo et al., 2001
CACTACEAE						
<i>Trichocereus pachanoi</i> Britt. & Rose	Bolivia	DAP	95 % EtOH Ext.	<i>In vitro/Plasmodium falciparum</i>	Active	Munoz et al., 2000
CAMPANULACEAE						
<i>Lobelia portoricensis</i> (Vatke) Urban.	Puerto Rico	*	95 % EtOH Ext.	<i>In vitro/Plasmodium falciparum</i>	Inactive	Antoun et al., 1993

Botanical family and scientific names	Country	Part of the plant	Extract of the plant	Organism tested and <i>Plasmodium</i> specie	Results	Reference
CANNABACEAE <i>Cannabis sativa</i> L.	USA	DL	*	<i>In vitro/Plasmodium falciparum</i> <i>In vitro/Plasmodium falciparum</i> <i>In vitro/Plasmodium falciparum</i>	Inactive Inactive Inactive	Antoun et al., 1993 Makler, 1994 Makler, 1994
CANELLACEAE <i>Canella winterana</i> (Wild Cinnamon)	USA	Rt	H ₂ O Ext. CHCl ₃ Ext.	Chicken/ <i>Plasmodium gallinaceum</i> Chicken/ <i>Plasmodium gallinaceum</i>	Inactive Active	Spencer et al., 1947 Spencer et al., 1947
		Sm	H ₂ O Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Active	Spencer et al., 1947
		Bh	CHCl ₃ Ext. H ₂ O Ext.	Chicken/ <i>Plasmodium gallinaceum</i> Chicken/ <i>Plasmodium gallinaceum</i>	Active Inactive	Spencer et al., 1947 Spencer et al., 1947
<i>Capsicodendron dinisii</i> Occhioni	USA	Rt	CHCl ₃ Ext. H ₂ O Ext.	Chicken/ <i>Plasmodium gallinaceum</i> Chicken/ <i>Plasmodium gallinaceum</i>	Active Inactive	Spencer et al., 1947 Spencer et al., 1947
			H ₂ O Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Active	Spencer et al., 1947
		Bk	CHCl ₃ Ext. H ₂ O Ext.	Chicken/ <i>Plasmodium gallinaceum</i> Chicken/ <i>Plasmodium gallinaceum</i>	Inactive Inactive	Spencer et al., 1947 Spencer et al., 1947
			CHCl ₃ Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
CARICACEAE <i>Carica quercifolia</i> Solms <i>Carica papaya</i> L.	Bolivia USA	DB + L Fl	95 % EtOH Ext. H ₂ O Ext.	Rat/ <i>Plasmodium vinckei</i> Chicken/ <i>Plasmodium gallinaceum</i>	Inactive Inactive	Munoz et al., 2000 Spencer et al., 1947
			CHCl ₃ Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
CARYOPHYLLACEAE <i>Stellaria ovata</i> Willd. ex Schtdl.	Bolivia	DAP	95 % EtOH Ext.	<i>In vitro/Plasmodium falciparum</i> Rat/ <i>Plasmodium vinckei</i>	Active Active	Munoz et al., 2000 Munoz et al., 2000
CASUARINACEAE <i>Casuarina equisetifolia</i> L.	Puerto Rico	*	95 % EtOH Ext.	<i>In vitro/Plasmodium falciparum</i> <i>In vitro/Plasmodium falciparum</i>	Inactive Inactive	Antoun et al., 1993 Antoun et al., 1993
CELASTRACEAE <i>Maytenus aquifolium</i> Mart. <i>Maytenus boaria</i> (Mayten)	Brazil USA	DEP Rt	95 % EtOH Ext. H ₂ O Ext.	Mouse/ <i>Plasmodium berghei</i> Chicken/ <i>Plasmodium gallinaceum</i>	Inactive Inactive	Carvalho et al., 1991 Spencer et al., 1947
			CHCl ₃ Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
<i>Plenckia populnea</i> Reissek	Brazil	DBh	Hexane Ext. EtOAc Ext.	Mouse/ <i>Plasmodium berghei</i> Mouse/ <i>Plasmodium berghei</i>	Inactive Inactive	Brandão et al., 1985 Brandão et al., 1985
CLUSIACEAE <i>Calophyllum brasiliense</i> Camb.	Puerto Rico	*	95 % EtOH Ext.	<i>In vitro/Plasmodium falciparum</i>	Inactive	Antoun et al., 1993
			95 % EtOH Ext.	<i>In vitro/Plasmodium falciparum</i>	Inactive	Antoun et al., 1993
<i>Calophyllum longifolium</i> Willd.	Panama	DL + Bh DSmBk	MeOH Ext. MeOH Ext.	<i>In vitro/Plasmodium falciparum</i> <i>In vitro/Plasmodium falciparum</i>	Active Active	Calderon et al., 2000 Calderon et al., 2000

Botanical family and scientific names	Country	Part of the plant	Extract of the plant	Organism tested and <i>Plasmodium</i> specie	Results	Reference
<i>Kielmeyera rosea</i> Mart.	Brazil	*	MeOH Ext. 95 % EtOH Ext. Hexane Ext.	<i>In vitro/Plasmodium falciparum</i> Mouse/ <i>Plasmodium berghei</i>	Active Inactive Inactive	Calderon et al., 2000 Brandão et al., 1985 Brandão et al., 1985
<i>Kielmeyera variabilis</i> Mart.	Brazil	*	95 % EtOH Ext. Hexane Ext.	Mouse/ <i>Plasmodium berghei</i> Mouse/ <i>Plasmodium berghei</i>	Inactive Inactive	Brandão et al., 1985 Brandão et al., 1985
COMMELINACEAE						
<i>Commelina elliptica</i> Kunth	Bolivia	DAP	95 % EtOH Ext.	<i>In vitro/Plasmodium falciparum</i> Rat/ <i>Plasmodium vinckei</i>	Active Active	Munoz et al., 2000 Munoz et al., 2000
CONVOLVULACEAE						
<i>Cuscuta grandiflora</i> Wall	Bolivia	DAP	95 % EtOH Ext.	Rat/ <i>Plasmodium vinckei</i>	Active	Munoz et al., 2000
<i>Evolvulus maritii</i> Meisn.	Brazil	DEP	Hexane Ext. 95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i> Mouse/ <i>Plasmodium berghei</i>	Inactive Inactive	Carvalho et al., 1991 Carvalho et al., 1991
<i>Ipomoea repanda</i> Jacq.	Puerto Rico	*	EtOAc Ext. 95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i> <i>In vitro/Plasmodium falciparum</i>	Inactive Inactive	Carvalho et al., 1991 Antoun et al., 1993
CUCURBITACEAE						
<i>Cucurbita maxima</i> Duch.	Brazil	DSd	95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i>	Active	Amorim et al., 1991
<i>Momordica charantia</i> L.	Brazil	DL DL+ Sm	95 % EtOH Ext. Infusion 95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i> Human adult/ <i>Plasmodium berghei</i> Mouse/ <i>Plasmodium berghei</i>	Inactive Active Active	Amorim et al., 1991 Ueno et al., 1996 Ueno et al., 1996
	Brazil	DFI	Infusion	Mouse/ <i>Plasmodium berghei</i>	Active	Ueno et al., 1996
	USA	AP	H ₂ O Ext. H ₂ O Ext.	Mouse/ <i>Plasmodium berghei</i> Chicken/ <i>Plasmodium gallinaceum</i>	Inactive Inactive	Carvalho et al., 1991 Spencer et al., 1947
				Duckling/ <i>Plasmodium cathemerium</i> Duckling/ <i>Plasmodium lophurae</i> Chicken/ <i>Plasmodium gallinaceum</i> Duckling/ <i>Plasmodium cathemerium</i>	Inactive Inactive Inactive Inactive	Spencer et al., 1947 Spencer et al., 1947 Spencer et al., 1947 Spencer et al., 1947
DATISACEAE						
<i>Datisca glomerata</i> (C. Presl) Baill.	USA	Rt	H ₂ O Ext. CHCl ₃ Ext.	Chicken/ <i>Plasmodium gallinaceum</i> Chicken/ <i>Plasmodium gallinaceum</i>	Inactive Active	Spencer et al., 1947 Spencer et al., 1947
EBENACEAE						
<i>Diospyros poeppigiana</i> A. DC.	USA	Bk	H ₂ O Ext. CHCl ₃ Ext.	Chicken/ <i>Plasmodium gallinaceum</i> Chicken/ <i>Plasmodium gallinaceum</i>	Inactive Inactive	Spencer et al., 1947 Spencer et al., 1947
ELAEocarpaceae						
<i>Vallea stipularis</i> L.F.	Bolivia	DL	95 % EtOH Ext.	<i>In vitro/Plasmodium falciparum</i> Rat/ <i>Plasmodium vinckei</i>	Active Active	Munoz et al., 2000 Munoz et al., 2000
ERYTHROXYLACEAE						
<i>Erythroxylum tortuosum</i> Mart.	Brazil	DSm	95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985

Botanical family and scientific names	Country	Part of the plant	Extract of the plant	Organism tested and <i>Plasmodium</i> specie	Results	Reference
EUPHORBIAEAE						
<i>Croton cajucara</i> Benth.	Brazil	DL	Hexane Ext. 95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i> Mouse/ <i>Plasmodium berghei</i>	Inactive Inactive	Brandão et al., 1985 Brandão et al., 1985
<i>Croton californicus</i> Muell. Arg.	USA	DEP	95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
<i>Croton capitatus</i> Michx.	USA	L + Sm	Hexane Ext. H ₂ O Ext. CHCl ₃ Ext.	Mouse/ <i>Plasmodium berghei</i> Chicken/ <i>Plasmodium gallinaceum</i> Chicken/ <i>Plasmodium gallinaceum</i>	Inactive Inactive Active	Brandão et al., 1985 Spencer et al., 1947 Spencer et al., 1947
<i>Croton guatemalensis</i> Lotts	Guatemala	DL	H ₂ O Ext. CHCl ₃ Ext. H ₂ O soluble fraction MeOH Ext. CH ₂ Cl ₂ Ext.	Chicken/ <i>Plasmodium gallinaceum</i> Chicken/ <i>Plasmodium gallinaceum</i> Mouse/ <i>Plasmodium berghei</i> Mouse/ <i>Plasmodium berghei</i> <i>In vitro/Plasmodium falciparum</i> <i>In vitro/Plasmodium falciparum</i>	Inactive Active Inactive Active Active Active	Spencer et al., 1947 Spencer et al., 1947 Franssen et al., 1997 Franssen et al., 1997 Franssen et al., 1997 Franssen et al., 1997
<i>Croton urucurana</i> Baill.	Brazil	DEP	H ₂ O soluble fraction MeOH Ext. CH ₂ Cl ₂ Ext.	Mouse/ <i>Plasmodium berghei</i> Mouse/ <i>Plasmodium berghei</i> Mouse/ <i>Plasmodium berghei</i>	Inactive Inactive Active	Brandão et al., 1985 Brandão et al., 1985 Brandão et al., 1985
<i>Dierberger</i> species	Brazil	*	95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
<i>Pera glabrata</i> (Schott) Poepp.	Brazil	DL	Hexane Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
<i>Phyllanthus piscatorum</i> Kunth	Venezuela	DAP	Dichloromethane Ext. MeOH Ext.	<i>In vitro/Plasmodium falciparum</i> <i>In vitro/Plasmodium falciparum</i>	Active Active	Gertsch et al., 2004 Gertsch et al., 2004
<i>Sapium biglanditosa</i> L.	Brazil	*	H ₂ O Ext. 95 % EtOH Ext.	Mouse/ <i>Plasmodium falciparum</i> Mouse/ <i>Plasmodium berghei</i>	Inactive Inactive	Brandão et al., 1985 Brandão et al., 1985
<i>Sapium haematospermum</i> Hub.	Bolivia	DL	Hexane Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
<i>Xenodendron reosulense</i>	Brazil	DBk	95 % EtOH Ext.	Mouse/ <i>Plasmodium falciparum</i>	Inactive	Brandão et al., 1985
FABACEAE						
<i>Amburana cearensis</i> A.C. Smith	Bolivia	DSmBk	CH ₂ Cl ₂ /Propanol Ext.	<i>In vitro/Plasmodium falciparum</i>	Active	Bravo et al., 1999
<i>Andira inermis</i> (W. Wright) H.B.K.	Panama	DL	Pet ether Ext.	<i>In vitro/Plasmodium falciparum</i>	Active	Kraft et al., 2001
<i>Bauhinia reticulata</i> D.C.	USA	DSm	Pet ether Ext.	<i>In vitro/Plasmodium falciparum</i>	Active	Kraft et al., 2000
<i>Bowditchia virgilioides</i> Kunth.	Bolivia	Rt	H ₂ O Ext. 95 % EtOH Ext.	Chicken/ <i>Plasmodium gallinaceum</i> <i>In vitro/Plasmodium falciparum</i>	Inactive Active	Spencer et al., 1947 Deharo et al., 2001
<i>Caesalpinia bonducella</i> F.	USA	Sd	Hexane Ext. H ₂ O Ext.	<i>In vitro/Plasmodium berghei</i> Mouse/ <i>Plasmodium berghei</i>	Active Active	Deharo et al., 2001 Deharo et al., 2001
<i>Caesalpinia pluviosa</i> DC.	Bolivia	DBk	H ₂ O Ext. CHCl ₃ Ext. 95 % EtOH Ext.	Chicken/ <i>Plasmodium gallinaceum</i> Chicken/ <i>Plasmodium gallinaceum</i> <i>In vitro/Plasmodium falciparum</i>	Inactive Inactive Active	Spencer et al., 1947 Spencer et al., 1947 Deharo et al., 2001

Botanical family and scientific names	Country	Part of the plant	Extract of the plant	Organism tested and <i>Plasmodium</i> specie	Results	Reference
<i>Cassia occidentalis</i> L.	Brazil	DRt	Decoction H ₂ O Ext.	<i>In vitro/Plasmodium berghei</i> Mouse/ <i>Plasmodium berghei</i>	Active	Deharo et al., 2001
<i>Copaifera trapezifolia</i> Hayne	Brazil	DBk DSd	Hexane Ext. 95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i> Mouse/ <i>Plasmodium berghei</i>	Active Inactive	Brandão et al., 1992 Carvalho et al., 1991
<i>Crotalaria mucronata</i> Desv.	Brazil	DEP	CHCl ₃ Ext. Hexane Ext.	Mouse/ <i>Plasmodium berghei</i> Mouse/ <i>Plasmodium berghei</i>	Inactive Inactive	Brandão et al., 1985 Brandão et al., 1985
<i>Delonix regia</i> (Bojer ex Hook.) Raf.	Puerto Rico	*	EtOAc Ext. 95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i> <i>In vitro/Plasmodium falciparum</i>	Inactive Inactive	Carvalho et al., 1991 Carvalho et al., 1991
<i>Desmodium discolor</i> Vogel	Brazil	DEP	Hexane Ext. 95 % EtOH Ext.	<i>In vitro/Plasmodium falciparum</i> Mouse/ <i>Plasmodium berghei</i>	Inactive Inactive	Antoun et al., 1993 Antoun et al., 1993
<i>Enterolobium timbouva</i> Mart.	Brazil	DL	EtOAc Ext. Hexane Ext.	Mouse/ <i>Plasmodium berghei</i> Mouse/ <i>Plasmodium berghei</i>	Inactive Inactive	Carvalho et al., 1991 Carvalho et al., 1991
<i>Galactia boavista</i> (Vell.) Burkart.	Brazil	DFr	MeOH Ext. 95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i> Mouse/ <i>Plasmodium berghei</i>	Inactive Inactive	Brandão et al., 1985 Brandão et al., 1985
<i>Lupinus luteus</i> L.	Brazil	*	MeOH Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
<i>Machaerium species</i>	Brazil	*	Total alkaloids Hexane Ext.	<i>In vitro/Plasmodium cathemerium</i> Mouse/ <i>Plasmodium berghei</i>	Active Inactive	Wasicky et al., 1942 Brandão et al., 1985
<i>Myroxylon peruiferum</i> L. F.	Bolivia	DFr	EtOAc Ext. 95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i> <i>In vitro/Plasmodium falciparum</i>	Inactive Active	Brandão et al., 1985 Brandão et al., 1985
FLACOURTIACEAE						
<i>Casearia sylvestris</i> SW.	Brazil	*	95 % EtOH Ext.	Rat/ <i>Plasmodium vinckei</i>	Active	Munoz et al., 2000 Munoz et al., 2000
<i>Lindackeria laurina</i> C. Presl.	USA	Sm	Hexane Ext. H ₂ O Ext.	Mouse/ <i>Plasmodium berghei</i> Mouse/ <i>Plasmodium berghei</i>	Inactive Inactive	Brandão et al., 1985 Brandão et al., 1985
<i>Lozania pittieri</i> (S. F. Blake) GANODERMATACEAE	Panama Panama	DL+ Bb DL+ Bb	CHCl ₃ Ext. MeOH Ext.	Chicken/ <i>Plasmodium gallinaceum</i> Chicken/ <i>Plasmodium gallinaceum</i>	Inactive Inactive	Spencer et al., 1947 Spencer et al., 1947
<i>Ganoderma lucidum</i> Reishi	USA-MA	DFr	MeOH Ext. H ₂ O Ext. 100 % EtOH Ext. *	<i>In vitro/Plasmodium falciparum</i> <i>In vitro/Plasmodium falciparum</i> <i>In vitro/Plasmodium falciparum</i>	Active Active Active	Calderon et al., 2000 Calderon et al., 2000 Lovy et al., 1999
GENTIANACEAE						
<i>Deianira erubescens</i> Cham.	Brazil	DL DRt	80 % EtOH Ext. 80 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i> Mouse/ <i>Plasmodium berghei</i>	Inactive Inactive	Andrade-Neto et al., 2003 Andrade-Neto et al., 2003

Botanical family and scientific names	Country	Part of the plant	Extract of the plant	Organism tested and <i>Plasmodium</i> specie	Results	Reference
<i>Listianthus speciosus</i> Cham. & Schltd	Brazil	DL	H ₂ O Ext.	Mouse/ <i>Plasmodium berghei</i>	Active	Carvalho & Krettl, 1991
				Mouse/ <i>Plasmodium berghei</i>	Inactive	Carvalho et al., 1991
				<i>In vitro</i> / <i>Plasmodium falciparum</i>	Active	Carvalho & Krettl, 1991
				Mouse/ <i>Plasmodium berghei</i>	Inactive	Carvalho et al., 1991
				Mouse/ <i>Plasmodium berghei</i>	Active	Carvalho & Krettl, 1991
				Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1992
<i>Tachia guianensis</i> Aublet	Brazil	*	H ₂ O Ext.	<i>In vitro</i> / <i>Plasmodium falciparum</i>	Active	Carvalho & Krettl, 1991
				Mouse/ <i>Plasmodium berghei</i>	Active	Carvalho et al., 1991
				<i>In vitro</i> / <i>Plasmodium falciparum</i>	Inactive	Carvalho et al., 1991
GERANIACEAE						
<i>Geranium robertianum</i> L. Herb	USA	EP	H ₂ O Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
LAMIACEAE						
<i>Glechoma hederacea</i> L.	USA	DEP	H ₂ O Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
				Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
<i>Hyptis species</i> Benth.	Brazil	DEP	CHCl ₃ Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Carvalho et al., 1991
				Mouse/ <i>Plasmodium berghei</i>	Inactive	Carvalho et al., 1991
				Mouse/ <i>Plasmodium berghei</i>	Inactive	Carvalho et al., 1991
				Mouse/ <i>Plasmodium berghei</i>	Inactive	Carvalho et al., 1991
<i>Leonotis nepetifolia</i> (L.) R. Br.	Brazil	DRt	95 % EtOH Ext. EtOAc Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Carvalho et al., 1991
				Mouse/ <i>Plasmodium berghei</i>	Active	Brandão et al., 1992
<i>Leonurus Artemisia</i> (Lour.) S. Y. Hu.	USA	EP	Decoction H ₂ O Ext. H ₂ O Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Carvalho et al., 1991
				Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
				Duckling/ <i>Plasmodium cathemerium</i>	Inactive	Spencer et al., 1947
<i>Leonurus cardiaca</i> (Motherwort)	USA	Rt	CHCl ₃ Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
				Duckling/ <i>Plasmodium lophurae</i>	Inactive	Spencer et al., 1947
<i>Satureja boliviana</i> Briq.	Bolivia	DL	H ₂ O Ext. CHCl ₃ Ext. 95 % EtOH Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
				Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
<i>Satureja parvifolia</i> (Phil.) Epling.	Argentina	DAP	H ₂ O Ext. MeOH Ext.	<i>In vitro</i> / <i>Plasmodium falciparum</i>	Active	Munoz et al., 2000
				Rat/ <i>Plasmodium vinckei</i>	Active	Munoz et al., 2000
Lauraceae						
<i>Licaria canella</i> (Meissn.) Kosterm.	Bolivia	DBk	95 % EtOH Ext.	<i>In vitro</i> / <i>Plasmodium falciparum</i>	Active	Debenedetti et al., 2002
				<i>In vitro</i> / <i>Plasmodium berghei</i>	Active	Debenedetti et al., 2002
<i>Nectandra aff. hihua</i> Rohwer	Bolivia	DBk	95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i>	Active	Dehara et al., 2001
				<i>In vitro</i> / <i>Plasmodium falciparum</i>	Active	Dehara et al., 2001
				<i>In vitro</i> / <i>Plasmodium berghei</i>	Active	Dehara et al., 2001
<i>Persea americana</i> Mill.	Brazil	*	95 % EtOH Ext. Hexane Ext.	Mouse/ <i>Plasmodium berghei</i>	Active	Dehara et al., 2001
				Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
				Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
LECYTHIDACEAE						

Botanical family and scientific names	Country	Part of the plant	Extract of the plant	Organism tested and <i>Plasmodium</i> specie	Results	Reference
<i>Bertholletia excelsa</i> H.B.K.	Brazil	*	Decoction H ₂ O Ext.	Mouse/ <i>Plasmodium berghei</i> Mouse/ <i>Plasmodium berghei</i>	Active Inactive	Brandão et al., 1992 Carvalho et al., 1991
LILIACEAE						
<i>Aloe spicata</i> L. F.	Brazil	DL	95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
<i>Bomarea amoena</i> (Herb.) M. Roem.	Bolivia	DFr	95 % EtOH Ext.	<i>In vitro</i> / <i>Plasmodium falciparum</i>	Active	Munoz et al., 2000
<i>Smilax havanensis</i> Jacq.	Puerto Rico	*	95 % EtOH Ext.	Rat/ <i>Plasmodium vinckei</i> <i>In vitro</i> / <i>Plasmodium falciparum</i> <i>In vitro</i> / <i>Plasmodium falciparum</i>	Inactive Inactive Inactive	Munoz et al., 2000 Antoun et al., 1993 Antoun et al., 1993
LINACEAE						
<i>Linum usitatissimum</i> L.	USA	DSd	Seed oil	Mouse/ <i>Plasmodium falciparum</i>	Active	Levander et al., 1991
LOGANIACEAE						
<i>Strychnos pseudoquina</i> St. Hil.	Brazil	Bk DBk	Total alkaloids 80 % EtOH Ext.	<i>In vitro</i> / <i>Plasmodium cathemerium</i> Mouse/ <i>Plasmodium berghei</i>	Active Inactive	Wasicky et al., 1942 Andrade-Neto et al., 2003
LORANTHACEAE						
<i>Struthanthus</i> species	Brazil	DEP	95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Carvalho et al., 1991
<i>Tripodanthus acutifolius</i> CF.	Bolivia	DL	CHCl ₃ Ext. 95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i> <i>In vitro</i> / <i>Plasmodium falciparum</i> Rat/ <i>Plasmodium vinckei</i>	Inactive Active Inactive	Carvalho et al., 1991 Munoz et al., 2000 Munoz et al., 2000
LYTHRACEAE						
<i>Heimia salicifolia</i> Link & Otto	Mexico	L + Sm	H ₂ O Ext. CHCl ₃ Ext.	Chicken/ <i>Plasmodium gallinaceum</i> Chicken/ <i>Plasmodium gallinaceum</i>	Inactive Inactive	Spencer et al., 1947 Spencer et al., 1947
MARCGRAVIACEAE						
<i>Marcgravia rectiflora</i> Triana	Argentina	DAP	MeOH Ext.	<i>In vitro</i> / <i>Plasmodium falciparum</i>	Active	Debenedetti et al., 2002
<i>Marcgravia sintensis</i>	Puerto Rico	*	95 % EtOH Ext.	<i>In vitro</i> / <i>Plasmodium falciparum</i>	Inactive	Antoun et al., 1993
	Puerto Rico	*	95 % EtOH Ext.	<i>In vitro</i> / <i>Plasmodium falciparum</i> <i>In vitro</i> / <i>Plasmodium falciparum</i>	Inactive Inactive	Antoun et al., 1993 Antoun et al., 1993
MAGNOLIACEAE						
<i>Liriodendron tulipifera</i> L.	USA	Bk	H ₂ O Ext.	Duckling/ <i>Plasmodium lophurae</i>	Inactive	Spencer et al., 1947
<i>Magnolia grandiflora</i> L.	USA	Bk	CHCl ₃ Ext. H ₂ O Ext. CHCl ₃ Ext.	Duckling/ <i>Plasmodium cathemerium</i> Duckling/ <i>Plasmodium cathemerium</i> Duckling/ <i>Plasmodium lophurae</i> Chicken/ <i>Plasmodium gallinaceum</i> Chicken/ <i>Plasmodium gallinaceum</i>	Inactive Inactive Active Inactive Inactive	Spencer et al., 1947 Spencer et al., 1947 Spencer et al., 1947 Spencer et al., 1947 Spencer et al., 1947
<i>Talauma ovata</i> St. Hil.	Brazil	DL	Hexane Ext. 95 % EtOH Ext. EtOAc Ext.	Mouse/ <i>Plasmodium berghei</i> Mouse/ <i>Plasmodium berghei</i> Mouse/ <i>Plasmodium berghei</i>	Inactive Inactive Inactive	Carvalho et al., 1991 Carvalho et al., 1991 Carvalho et al., 1991
MALPIGHIACEAE						
<i>Banisteriopsis leona</i>	USA	Bh	H ₂ O Ext. CHCl ₃ Ext.	Chicken/ <i>Plasmodium gallinaceum</i> Chicken/ <i>Plasmodium gallinaceum</i>	Inactive Inactive	Spencer et al., 1947 Spencer et al., 1947

Botanical family and scientific names	Country	Part of the plant	Extract of the plant	Organism tested and Plasmodium specie	Results	Reference
			H ₂ O Ext.	<i>In vitro/Plasmodium falciparum</i>	Inactive	Bray et al., 1990
		DSmWd	Pet ether Ext.	<i>In vitro/Plasmodium falciparum</i>	Inactive	Bray et al., 1990
			MeOH Ext.	<i>In vitro/Plasmodium falciparum</i>	Inactive	Bray et al., 1990
		DFr	H ₂ O Ext.	<i>In vitro/Plasmodium falciparum</i>	Inactive	Bray et al., 1990
			Pet ether Ext.	<i>In vitro/Plasmodium falciparum</i>	Inactive	Bray et al., 1990
			MeOH Ext.	<i>In vitro/Plasmodium falciparum</i>	Inactive	Bray et al., 1990
			H ₂ O Ext.	<i>In vitro/Plasmodium falciparum</i>	Inactive	Bray et al., 1990
<i>Guarea pyrififormis</i> T.D. Penn.	Costa Rica	FshWd	95 % EtOH Ext.	<i>In vitro/Plasmodium falciparum</i>	Active	MacKinnon et al., 1997
<i>Guarea trichilioides</i> L.	USA	Rt	H ₂ O Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
<i>Melia azedarach</i> L.	USA	Bk	CHCl ₃ Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
			H ₂ O Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
<i>Trichilia glabra</i> L.	Costa Rica	FshBk	95 % EtOH Ext.	<i>In vitro/Plasmodium falciparum</i>	Active	MacKinnon et al., 1997
<i>Trichilia hirta</i> L.	Costa Rica	FshL	95 % EtOH Ext.	<i>In vitro/Plasmodium falciparum</i>	Active	MacKinnon et al., 1997
		DL	95 % EtOH Ext.	<i>In vitro/Plasmodium falciparum</i>	Active	Antoun et al., 2001
<i>Trichilia trifolia</i> L.	Puerto Rico	FshL	95 % EtOH Ext.	<i>In vitro/Plasmodium falciparum</i>	Active	MacKinnon et al., 1997
			MeOH Ext.	<i>In vitro/Plasmodium falciparum</i>	Inactive	Bray et al., 1990
MENYANTHACEAE						
<i>Menyanthes trifoliata</i> L.	USA	L	H ₂ O Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
			CHCl ₃ Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
MENISPERMACEAE						
<i>Cissampelos pareira</i> L.	Puerto Rico	DL	95 % EtOH Ext.	<i>In vitro/Plasmodium falciparum</i>	Active	Antoun et al., 2001
		DRt	H ₂ O Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Active	Spencer et al., 1947
			CHCl ₃ Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Active	Spencer et al., 1947
			CHCl ₃ Ext.	Duckling/ <i>Plasmodium cathemerium</i>	Active	Spencer et al., 1947
			H ₂ O Ext.	Duckling/ <i>Plasmodium cathemerium</i>	Inactive	Spencer et al., 1947
			H ₂ O Ext.	Duckling/ <i>Plasmodium lophurae</i>	Inactive	Spencer et al., 1947
MYRICACEAE						
<i>Myrica cerifera</i> L.	Puerto Rico	DL	95 % EtOH Ext.	<i>In vitro/Plasmodium falciparum</i>	Active	Antoun et al., 1993
<i>Myrica pubescens</i> Humb. & Bonpl.	Bolivia	DL	95 % EtOH Ext.	<i>In vitro/Plasmodium falciparum</i>	Active	Munoz et al., 2000
				Rat/ <i>Plasmodium vinckei</i>	Active	Munoz et al., 2000
MYRTACEAE						
<i>Eucalyptus globulus</i> Labill.	USA	L + Sm	H ₂ O Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
			CHCl ₃ Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
			95 % EtOH Ext.	<i>In vitro/Plasmodium falciparum</i>	Inactive	Antoun et al., 2001
<i>Psidium guajava</i> L.	Puerto Rico	DSm				
MONIMIACEAE						
<i>Siparuna andina</i> (Tul.) DC.	Panama	DL	*	<i>In vitro/Plasmodium falciparum</i>	Active	Jenett Siems et al., 2000
MORACEAE						
<i>Castilla elastica</i> Cerv.	Puerto Rico	DSm	95 % EtOH Ext.	<i>In vitro/Plasmodium falciparum</i>	Active	Antoun et al., 1993
				<i>In vitro/Plasmodium falciparum</i>	Inactive	Antoun et al., 1993

Botanical family and scientific names	Country	Part of the plant	Extract of the plant	Organism tested and <i>Plasmodium</i> specie	Results	Reference
<i>Dorstenia brasiliensis</i> Lam.	Brazil	DRt	H ₂ O Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Carvalho et al., 1991
<i>Ficus citrifolia</i> Mill.	Puerto Rico	DL	95 % EtOH Ext.	<i>In vitro/Plasmodium falciparum</i>	Active	Antoun et al., 2001
<i>Maclura tinctoria</i> (L.) D. Don.	Panama	DSmBk	MeOH Ext.	<i>In vitro/Plasmodium falciparum</i>	Active	Calderon et al., 2000
<i>Morus Alba</i> L.	USA	L + Sm	CHCl ₃ Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
<i>Olmedia áspera</i> Ruiz & Pav.	Panama	DL + Bh	H ₂ O Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
MORINGACEAE						
<i>Moringa pterygosperma</i> Gaertn.	USA	Bk	H ₂ O Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
MYRISTICACEAE						
<i>Virola surinamensis</i> Warb.	Brazil	EOL	Essential oil	<i>In vitro/Plasmodium falciparum</i>	Active	Lopes et al., 1999
MYRTACEAE						
<i>Campomanesia</i> species	Brazil	DL	EtOAc Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
<i>Eucalyptus globulus</i> Labill.	Brazil	DL	Hexane Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
<i>Myrcia</i> species DC. ex Guill.	Brazil	*	Hexane Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
			EtOAc Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
			95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
NYCTAGINACEAE						
<i>Boerhavia hirsuta</i> L.	Brazil	DL	Decoction	Mouse/ <i>Plasmodium berghei</i>	Active	Brandão et al., 1992
			H ₂ O Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Carvalho et al., 1991
OLEACEAE						
<i>Chionanthus virginicus</i> L.	USA	DRt	H ₂ O Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
			CHCl ₃ Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
OSCILLATORIAEAE						
<i>Lyngbya majuscula</i> Harvey Hook.	Panama	Cells	EtOAc Ext.	<i>In vitro/Plasmodium falciparum</i>	Active	Mcpheil et al., 2007
PAPAVERACEAE						
<i>Argemone mexicana</i> L.	Bolivia	DFI	95 % EtOH Ext.	Rat/ <i>Plasmodium vinckei</i>	Active	Munoz et al., 2000
	USA	EP	H ₂ O Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
			CHCl ₃ Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
PASSIFLORACEAE						
<i>Passiflora incarnata</i> L.	USA	Rt	H ₂ O Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
			CHCl ₃ Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
<i>Passiflora mexicana</i> Juss.	USA	L + Sm	H ₂ O Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
			CHCl ₃ Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
PHYTOLACCACEAE						
<i>Petiveria alliacea</i> L.	Puerto Rico	*	95 % EtOH Ext.	<i>In vitro/Plasmodium falciparum</i>	Inactive	Antoun et al., 1993
PIPERACEAE						
<i>Peperomia pellucida</i> (L.) Kunth.	Bolivia	*	95 % EtOH Ext.	<i>In vitro/Plasmodium falciparum</i>	Active	Munoz et al., 2000
	Brazil	DL	95 % EtOH Ext.	Rat/ <i>Plasmodium vinckei</i>	Active	Munoz et al., 2000
				Mouse/ <i>Plasmodium berghei</i>	Inactive	Amorim et al., 1988

Botanical family and scientific names	Country	Part of the plant	Extract of the plant	Organism tested and <i>Plasmodium</i> specie	Results	Reference
<i>Piper umbellatum</i> L. POACEAE	Brazil	DEP DL	95 % EtOH Ext. 95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i> Mouse/ <i>Plasmodium berghei</i>	Inactive Active	Amorim et al., 1988 Amorim et al., 1988
<i>Andropogon</i> species POLYGALACEAE	Brazil	DEP	Hexane Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
<i>Monnina salicifolia</i> Ruiz & Pav. POLYGONACEAE	Bolivia	DL	95 % EtOH Ext.	Rat/ <i>Plasmodium vinckei</i>	Active	Munoz et al., 2000
<i>Coccoloba pubescens</i> L.	Puerto Rico	*	95 % EtOH Ext.	<i>In vitro/Plasmodium falciparum</i>	Inactive	Antoun et al., 1993
<i>Coccoloba swartzii</i> Meisn.	Puerto Rico	*	95 % EtOH Ext.	<i>In vitro/Plasmodium falciparum</i>	Inactive	Antoun et al., 1993
<i>Coccoloba uvifera</i> Jacq.	Puerto Rico	*	95 % EtOH Ext.	<i>In vitro/Plasmodium falciparum</i>	Inactive	Antoun et al., 1993
<i>Polygonum aviculare</i> L.	USA	EP	CHCl ₃ Ext. H ₂ O Ext.	Duckling/ <i>Plasmodium cathemerium</i> Duckling/ <i>Plasmodium lophurae</i>	Inactive Inactive	Spencer et al., 1947 Spencer et al., 1947
			CHCl ₃ Ext.	Duckling/ <i>Plasmodium lophurae</i>	Inactive	Spencer et al., 1947
			H ₂ O Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
			CHCl ₃ Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
			H ₂ O Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
			CHCl ₃ Ext.	Duckling/ <i>Plasmodium lophurae</i>	Inactive	Spencer et al., 1947
			H ₂ O Ext.	Duckling/ <i>Plasmodium lophurae</i>	Inactive	Spencer et al., 1947
			CHCl ₃ Ext.	Duckling/ <i>Plasmodium cathemerium</i>	Inactive	Spencer et al., 1947
			H ₂ O Ext.	Duckling/ <i>Plasmodium cathemerium</i>	Inactive	Spencer et al., 1947
			H ₂ O Ext.	Duckling/ <i>Plasmodium lophurae</i>	Inactive	Spencer et al., 1947
POLYPODIACEAE						
<i>Polypodium buchtienii</i> H. Christ	Bolivia	DL	95 % EtOH Ext.	<i>In vitro/Plasmodium falciparum</i>	Active	Munoz et al., 2000
<i>Polypodium decumanum</i> J. Smith	Bolivia	*	CH ₂ Cl ₂ Ext.	<i>In vivo/Plasmodium vinckei</i>	Active	Munoz et al., 2000
<i>Polyporus umbellatus</i> (Pers.) Fr.	USA	DFr	H ₂ O Ext.	<i>In vitro/Plasmodium falciparum</i>	Inactive	Bustillos et al., 2002
POLYPORACEAE						
<i>Grifola frondosa</i> (Dicks.) Gray	USA	DFr	H ₂ O Ext.	<i>In vitro/Plasmodium falciparum</i>	Active	Lovy et al., 1999
<i>Laetiporus sulphureus</i> Murr.	USA	DFr	*	<i>In vitro/Plasmodium falciparum</i>	Active	Lovy et al., 1999
<i>Trametes versicolor</i> (L. Fries) Pilat	USA	DFr	*	<i>In vitro/Plasmodium falciparum</i>	Active	Lovy et al., 1999
RHAMNACEAE						
<i>Ampelozizyphus amazonicus</i> Ducke	Brazil	RT DRt	H ₂ O Ext. H ₂ O Ext.	<i>In vitro/Plasmodium gallinaceum</i> Mouse/ <i>Plasmodium berghei</i>	Inactive Inactive	Carvalho et al., 1992 Brandão et al., 1985
			95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
<i>Ceanothus americanus</i> L.	USA	DRt	100 % EtOH Ext. H ₂ O Ext.	Chicken/ <i>Plasmodium gallinaceum</i> Chicken/ <i>Plasmodium gallinaceum</i>	Active Inactive	Krettli et al., 2001a,b Spencer et al., 1947
			CHCl ₃ Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
			H ₂ O Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
<i>Ceanothus integerrimus</i> Hook.	USA	Rt	H ₂ O Ext.	Duckling/ <i>Plasmodium lophurae</i>	Inactive	Spencer et al., 1947
			CHCl ₃ Ext.	Duckling/ <i>Plasmodium lophurae</i>	Inactive	Spencer et al., 1947
			H ₂ O Ext.	Duckling/ <i>Plasmodium lophurae</i>	Inactive	Spencer et al., 1947
			CHCl ₃ Ext.	Duckling/ <i>Plasmodium cathemerium</i>	Inactive	Spencer et al., 1947
			H ₂ O Ext.	Duckling/ <i>Plasmodium cathemerium</i>	Inactive	Spencer et al., 1947

Botanical family and scientific names	Country	Part of the plant	Extract of the plant	Organism tested and <i>Plasmodium</i> specie	Results	Reference
<i>Colubrina arborescens</i> (Mill.) Sarg.	USA	Bk	CHCl ₃ Ext.	Duckling/ <i>Plasmodium lophurae</i>	Inactive	Spencer et al., 1947
<i>Ziziphus joazeiro</i> Mart.	Brazil	DEP	H ₂ O Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
RHIZOPHORACEAE			H ₂ O Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Carvalho et al., 1991
<i>Rhizophora mangle</i> L.	Puerto Rico	*	95 % EtOH Ext.	<i>In vitro</i> / <i>Plasmodium falciparum</i>	Inactive	Antoun et al., 1993
ROSACEAE						
<i>Geum rivale</i> Linn.	USA	Rt	H ₂ O Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
<i>Kageneckia lanceolata</i> Ruiz & Pav.	Bolivia	DL	CHCl ₃ Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
			95 % EtOH Ext.	<i>In vitro</i> / <i>Plasmodium falciparum</i>	Active	Munoz et al., 2000
				Rat/ <i>Plasmodium vinckei</i>	Active	Munoz et al., 2000
RUBIACEAE						
<i>Cinchona ledgeriana</i> Moens	Brazil	DBk	Total alkaloids	Duckling/ <i>Plasmodium lophurae</i>	Active	Seeler et al., 1943
<i>Cinchona pubescens</i> Vahl.	Argentina	DTBk	Total alkaloids	Human adult	Active	Loizaga & Sagastume, 1935
<i>Coutarea hexandra</i> K. Schum.	Brazil	DBk	H ₂ O Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Carvalho et al., 1991
<i>Coutarea latiflora</i> DC.	Mexico	DSmBk	35 % EtOH Ext.	<i>In vitro</i> / <i>Plasmodium falciparum</i>	Active	Noster & Kraus, 1990
			Ether Ext.	<i>In vitro</i> / <i>Plasmodium falciparum</i>	Active	Noster & Kraus, 1990
			EtOAc Ext.	<i>In vitro</i> / <i>Plasmodium falciparum</i>	Active	Noster & Kraus, 1990
<i>Diodia brasiliensis</i> Spreng.	Brazil	*	95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
<i>Exostema caribaeum</i> (Jacq.) Schult.	Mexico	DSmBk	35 % EtOH Ext.	<i>In vitro</i> / <i>Plasmodium falciparum</i>	Active	Noster & Kraus, 1990
			Ether Ext.	<i>In vitro</i> / <i>Plasmodium falciparum</i>	Active	Noster & Kraus, 1990
			EtOAc Ext.	<i>In vitro</i> / <i>Plasmodium falciparum</i>	Active	Noster & Kraus, 1990
<i>Exostema mexicanum</i> A. Gray.	Guatemala	DSmBk	H ₂ O soluble fraction	<i>In vitro</i> / <i>Plasmodium falciparum</i>	Inactive	Kohler et al., 2001
			Pet ether Ext.	<i>In vitro</i> / <i>Plasmodium falciparum</i>	Active	Kohler et al., 2001
			MeOH Ext.	<i>In vitro</i> / <i>Plasmodium falciparum</i>	Inactive	Kohler et al., 2001
			H ₂ O soluble fraction	<i>In vitro</i> / <i>Plasmodium falciparum</i>	Inactive	Kohler et al., 2001
			Pet ether Ext.	<i>In vitro</i> / <i>Plasmodium falciparum</i>	Active	Kohler et al., 2001
			MeOH Ext.	<i>In vitro</i> / <i>Plasmodium falciparum</i>	Inactive	Kohler et al., 2001
<i>Faramaea occidentalis</i> L.	Puerto Rico	DL	95 % EtOH Ext.	<i>In vitro</i> / <i>Plasmodium falciparum</i>	Active	Antoun et al., 2001
<i>Psychotria klugii</i> Standl.	Peru	DSmBk	Alkaloid fraction	<i>In vitro</i> / <i>Plasmodium falciparum</i>	Active	Muhammad et al., 2003
			95 % EtOH Ext.	<i>In vitro</i> / <i>Plasmodium falciparum</i>	Active	Muhammad et al., 2003
<i>Randia aculeata</i> L.	Puerto Rico	*	95 % EtOH Ext.	<i>In vitro</i> / <i>Plasmodium falciparum</i>	Inactive	Antoun et al., 1993
<i>Randia spinosa</i> (Jacq.) H. Karst.	Bolivia	DFr	95 % EtOH Ext.	<i>In vivo</i> / <i>Plasmodium vinckei</i>	Inactive	Munoz et al., 2000
<i>Remijita ferruginea</i> (A.St. Hil.) DC.	Brazil	DBk	80 % EtOH Ext.	<i>In vivo</i> / <i>Plasmodium berghei</i>	Active	Andrade-Neto et al., 2003
<i>Rondeletia inermis</i> Krug & Urban.	Puerto Rico	*	95 % EtOH Ext.	<i>In vitro</i> / <i>Plasmodium falciparum</i>	Inactive	Antoun et al., 1993
RUTACEAE						
<i>Amyris elemifera</i> L.	USA	Wd	H ₂ O Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
<i>Esenbeckia febrifuga</i> A. Juss.	Brazil	DL	CHCl ₃ Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
			H ₂ O Ext.	Mouse/ <i>Plasmodium berghei</i>	Active	Carvalho & Krettli, 1991
				Mouse/ <i>Plasmodium berghei</i>	Inactive	Carvalho et al., 1991

Botanical family and scientific names	Country	Part of the plant	Extract of the plant	Organism tested and <i>Plasmodium</i> specie	Results	Reference
<i>Galipea longiflora</i> K. Krause	Paraguay	DBk	H ₂ O Ext.	Mouse/ <i>Plasmodium berghei</i>	Active	Carvalho et al., 1991
<i>Galipea officinalis</i> J. Hancock.	Venezuela	ESmBk DTBk	Total alkaloids Hexane Ext.	Mouse/ <i>Plasmodium vinckei</i> <i>In vitro/Plasmodium falciparum</i>	Active Active	Gantier et al., 1996 Jacquemon-Collet et al., 2002
<i>Orixa japonica</i> Thunberg	USA	Rt	CHCl ₃ Ext. Hexane Ext.	<i>In vitro/Plasmodium falciparum</i> <i>In vitro/Plasmodium falciparum</i>	Active Active	Jacquemon-Collet et al., 2002 Jacquemon-Collet et al., 2002
<i>Zanthoxylum minutiflorum</i> Tul.	Brazil	*	H ₂ O Ext. CHCl ₃ Ext.	Chicken/ <i>Plasmodium gallinaceum</i> Chicken/ <i>Plasmodium gallinaceum</i>	Active Inactive	Spencer et al., 1947 Spencer et al., 1947
<i>Zanthoxylum naranjillo</i> (Griseb.)	Brazil	DL DL	Hexane Ext. 95 % EtOH Ext. 95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i> Mouse/ <i>Plasmodium berghei</i> Mouse/ <i>Plasmodium berghei</i>	Inactive Inactive Inactive	Brandão et al., 1985 Brandão et al., 1985 Brandão et al., 1985
<i>Zanthoxylum riedelianum</i> Engl.	Brazil	*	Hexane Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Carvalho et al., 1991
SAPINDACEAE						
<i>Sapindus divaricatus</i> Cambess.	Brazil	DEP	95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Carvalho et al., 1991
<i>Serjania speciosa</i>	Brazil	*	95 % EtOH Ext. Hexane Ext.	Mouse/ <i>Plasmodium berghei</i> Mouse/ <i>Plasmodium berghei</i>	Inactive Inactive	Brandão et al., 1985 Brandão et al., 1985
SAPOTACEAE						
<i>Chrysophyllum oliviforme</i> L.	Puerto Rico	*	95 % EtOH Ext.	<i>In vitro/Plasmodium falciparum</i>	Inactive	Antoun et al., 1993
<i>Pouteria venosa</i> (Mart.) SAXIFRAGACEAE	Brazil	DL+ Sm	95 % EtOH Ext.	<i>In vitro/Plasmodium berghei</i>	Inactive	Montenegro et al., 2006
<i>Dichroa febrifuga</i> Lour.	USA	Rt	H ₂ O Ext. CHCl ₃ Ext.	Chicken/ <i>Plasmodium gallinaceum</i> Chicken/ <i>Plasmodium gallinaceum</i>	Active Active	Spencer et al., 1947 Spencer et al., 1947
<i>Escallonia montevidensis</i> DC.	Brazil	*	95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
<i>Hydrangea arborea</i> L.	USA	Rt	Hexane Ext. H ₂ O Ext.	Chicken/ <i>Plasmodium berghei</i> Chicken/ <i>Plasmodium gallinaceum</i>	Inactive Inactive	Brandão et al., 1985 Spencer et al., 1947
SCROPHULARIACEAE						
<i>Calceolaria rivularis</i> Kraenzl.	Bolivia	DAP	95 % EtOH Ext.	<i>In vitro/Plasmodium falciparum</i> Rat/ <i>Plasmodium vinckei</i>	Active Active	Munoz et al., 2000 Munoz et al., 2000
SIMARUBACEAE						
<i>Ailanthus altissima</i> (Mill.) Swingle	USA	FshSd	95 % EtOH Ext. EtOAc Ext. H ₂ O Ext.	<i>In vitro/Plasmodium falciparum</i> <i>In vitro/Plasmodium falciparum</i> <i>In vitro/Plasmodium falciparum</i>	Active Active Active	Okumade et al., 2003 Okumade et al., 2003 Okumade et al., 2003

Botanical family and scientific names	Country	Part of the plant	Extract of the plant	Organism tested and <i>Plasmodium</i> specie	Results	Reference
		DWd	CHCl ₃ Ext.	<i>In vitro/Plasmodium falciparum</i>	Active	Phillipson & O'Neill, 1986
<i>Ailanthus excelsa</i> Roxb.	USA	Wd	CHCl ₃ Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Active	Spencer et al., 1947
		Bk	H ₂ O Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
<i>Ailanthus timberbiflora</i> F. Muell.	USA	Bk	CHCl ₃ Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Active	Spencer et al., 1947
			H ₂ O Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Active	Spencer et al., 1947
<i>Brucea antidysenterica</i> Mill.	USA	Rt	CHCl ₃ Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
<i>Cadellia monostylis</i> Benth.	USA	Bk	H ₂ O Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
			CHCl ₃ Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
<i>Cadellia pentastylis</i> F. Muell.	USA	Rt	H ₂ O Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
		Wd	H ₂ O Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
			CHCl ₃ Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
		Bk	H ₂ O Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
			CHCl ₃ Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
		Rt	CHCl ₃ Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
<i>Castela coccinea</i> Griseb.	USA	*	H ₂ O Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
			CHCl ₃ Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
<i>Castela depressa</i> Turp.	USA	Bh	H ₂ O Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Active	Spencer et al., 1947
			CHCl ₃ Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Active	Spencer et al., 1947
		Sm	H ₂ O Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Active	Spencer et al., 1947
			CHCl ₃ Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Active	Spencer et al., 1947
<i>Castela macrophylla</i> Urb.	USA	Rt	H ₂ O Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Active	Spencer et al., 1947
			CHCl ₃ Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
		Sm	H ₂ O Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Active	Spencer et al., 1947
			CHCl ₃ Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Active	Spencer et al., 1947
<i>Castela spinosa</i> Cronquist	USA	Rt	H ₂ O Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Active	Spencer et al., 1947
<i>Castela tortuosa</i> Liebm.	USA	Fr	H ₂ O Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
			CHCl ₃ Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Active	Spencer et al., 1947
		L	H ₂ O Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Active	Spencer et al., 1947
			CHCl ₃ Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Active	Spencer et al., 1947
<i>Castela tweedii</i> Planch.	USA	Sm	H ₂ O Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Active	Spencer et al., 1947
			CHCl ₃ Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Active	Spencer et al., 1947
		Rt	H ₂ O Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Active	Spencer et al., 1947
			CHCl ₃ Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
<i>Hannoa klaineana</i> Pierre & Engl.	USA	Rt	H ₂ O Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
<i>Harrisonia abyssinica</i> Oliv.	USA	Rt	H ₂ O Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
			CHCl ₃ Ext.	Duckling/ <i>Plasmodium lophurae</i>	Inactive	Spencer et al., 1947
			H ₂ O Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
<i>Irvingia gabonensis</i> Baillon	USA	Rt	H ₂ O Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947

Botanical family and scientific names	Country	Part of the plant	Extract of the plant	Organism tested and <i>Plasmodium</i> specie	Results	Reference
<i>Irvingia smithii</i> Hook. F.	USA	Wd	H ₂ O Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
		Rt	H ₂ O Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
			CHCl ₃ Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Active	Spencer et al., 1947
<i>Kirkia acuminata</i> Oliv.	USA	Rt	H ₂ O Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
			CHCl ₃ Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
<i>Klainedoxa gabonensis</i> Pierre	USA	Rt	H ₂ O Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
			CHCl ₃ Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
<i>Klainedoxa grandifolia</i> Engl.	USA	Rt	H ₂ O Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
		Sm	CHCl ₃ Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
<i>Odyndea zimmermannii</i> Engl.	USA	Rt	H ₂ O Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Active	Spencer et al., 1947
<i>Picramnia antidesma</i> Sw.	USA	Bh	H ₂ O Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
			CHCl ₃ Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Active	Spencer et al., 1947
<i>Picramnia carpinterae</i> Pol.	USA	Wd	H ₂ O Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
			CHCl ₃ Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
<i>Picramnia locuples</i> Standl.	USA	Wd	CHCl ₃ Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
<i>Picramnia longissima</i> Tul.	USA	Rt	H ₂ O Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
			CHCl ₃ Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
<i>Picramnia pentandra</i> Sw.	USA	Rt	H ₂ O Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
			CHCl ₃ Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
		Sm	H ₂ O Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Active	Spencer et al., 1947
			CHCl ₃ Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
<i>Picramnia sellowii</i> Planch.	USA	Rt	H ₂ O Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
			CHCl ₃ Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
<i>Picramnia xalapensis</i> Planch.	USA	Rt	H ₂ O Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
			CHCl ₃ Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
<i>Picrasma antillana</i> (Eggers) Urb.	USA	Wd	H ₂ O Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
			CHCl ₃ Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
<i>Picrasma crenata</i> (Vell.) Engl.	Argentina	DAP	MeOH Ext.	<i>In vitro/Plasmodium falciparum</i>	Active	Debenedetti et al., 2002
			H ₂ O Ext.	<i>In vitro/Plasmodium falciparum</i>	Active	Debenedetti et al., 2002
		Rt	H ₂ O Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
			CHCl ₃ Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
<i>Picrasma excelso</i> (Sw.) Planch.	USA	Wd	H ₂ O Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
			CHCl ₃ Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
<i>Picrasma nepalensis</i> Benn.	USA	Rt	H ₂ O Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
			CHCl ₃ Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Active	Spencer et al., 1947
<i>Picrolemma sprucei</i> Hook. F.	USA	Rt	H ₂ O Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Active	Spencer et al., 1947
			CHCl ₃ Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Active	Spencer et al., 1947
<i>Simaba cedron</i> Planch.	Panama	DL	Pet ether Ext.	<i>In vitro/Plasmodium falciparum</i>	Inactive	O'Neill et al., 1985
			CHCl ₃ Ext.	<i>In vitro/Plasmodium falciparum</i>	Active	O'Neill et al., 1985

Botanical family and scientific names	Country	Part of the plant	Extract of the plant	Organism tested and <i>Plasmodium</i> specie	Results	Reference
			MeOH Ext.	<i>In vitro/Plasmodium falciparum</i>	Active	O'Neill et al., 1985
		DfFr	Pet ether Ext.	<i>In vitro/Plasmodium falciparum</i>	Inactive	O'Neill et al., 1985
			MeOH Ext.	<i>In vitro/Plasmodium falciparum</i>	Active	O'Neill et al., 1985
			H ₂ O Ext.	<i>In vitro/Plasmodium falciparum</i>	Active	O'Neill et al., 1985
			CHCl ₃ Ext.	<i>In vitro/Plasmodium falciparum</i>	Active	O'Neill et al., 1985
			95 % EtOH Ext.	<i>In vitro/Plasmodium falciparum</i>	Active	Cabral et al., 1993
<i>Simaba guianensis</i> (Aubl.) Engl	Brazil	DTBk	CHCl ₃ Ext.	<i>In vitro/Plasmodium falciparum</i>	Inactive	O'Neill et al., 1987
<i>Simarouba amara</i> Aubl.	Panama	DfFr	MeOH Ext.	<i>In vitro/Plasmodium falciparum</i>	Active	O'Neill et al., 1988
			H ₂ O soluble fraction	Mouse/ <i>Plasmodium berghei</i>	Active	O'Neill et al., 1988
<i>Simarouba glauca</i> DC.	Guatemala	DBk	MeOH Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Franssen et al., 1997
			CH ₂ Cl ₂ Ext.	Mouse/ <i>Plasmodium berghei</i>	Active	Franssen et al., 1997
				<i>In vitro/Plasmodium falciparum</i>	Active	Franssen et al., 1997
SOLANACEAE						
<i>Acnistus arborescens</i> L.	Brazil	*	95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
			Hexane Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
<i>Dunalia brachyacantha</i> Miens.	Bolivia	DL	95 % EtOH Ext.	<i>In vitro/Plasmodium falciparum</i>	Active	Munoz et al., 2000
<i>Saracha punctata</i> Ruiz & Pavon	Bolivia	DL	95 % EtOH Ext.	Rat/ <i>Plasmodium vinckei</i>	Active	Munoz et al., 2000
<i>Solanum nudum</i> Kunth	Colombia	DL+ Sm	H ₂ O Ext.	<i>In vitro/Plasmodium vinckei</i>	Inactive	Moretti et al., 1998
STAPHYLEACEAE				Mouse/ <i>Plasmodium vinckei</i>	Active	Moretti et al., 1998
<i>Turpinia occidentalis</i> (Sw.) G. Don.	Panama	DSmBk	MeOH Ext.	Mouse/ <i>Plasmodium berghei</i>	Active	Marcela et al., 2001
THYMELAEACEAE						
<i>Daphne mezereum</i> L.	USA	Rt	H ₂ O Ext.	<i>In vitro/Plasmodium falciparum</i>	Active	Calderon et al., 2000
			CHCl ₃ Ext.	Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
				Chicken/ <i>Plasmodium gallinaceum</i>	Inactive	Spencer et al., 1947
TRICHOLOMATACEAE						
<i>Lentinus edodes</i> (Berek) Sing.	USA	DfFr	H ₂ O Ext.	<i>In vitro/Plasmodium falciparum</i>	Active	Lovy et al., 1999
TURNERACEAE						
<i>Turnera ulmifolia</i> L.	USA	DL	95 % EtOH Ext.	<i>In vitro/Plasmodium falciparum</i>	Active	Antoun et al., 2001
VELLOZIACEAE						
<i>Vellozia bicolor</i> L. B. Sm.	Brazil	*	CHCl ₃ Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
			Hexane Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
<i>Vellozia compacta</i> Mart. ex Schult.	Brazil	*	95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
<i>Vellozia epidendroides</i> Mart.	Brazil	*	Hexane Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
			EtOAc Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
<i>Vellozia flavicans</i> Mart. ex Schult.	Brazil	*	EtOAc Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
			CHCl ₃ Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
<i>Vellozia glabra</i> J. C. Mikan.	Brazil	*	95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
<i>Vellozia lanata</i> Pohl.	Brazil	*	95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985

Botanical family and scientific names	Country	Part of the plant	Extract of the plant	Organism tested and <i>Plasmodium</i> specie	Results	Reference
<i>Vellozia leptophylla</i> Seub.	Brazil	*	95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
<i>Vellozia phalocarpa</i> Pohl.	Brazil	*	95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
<i>Vellozia piresiana</i> L. B. Smith	Brazil	*	95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
<i>Vellozia pusilla</i> Pohl	Brazil	*	Hexane Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
<i>Vellozia stipitata</i> L.B. Smith	Brazil	*	CHCl ₃ Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
<i>Vellozia subulata</i> L.B.Sm. & Ayensu	Brazil	*	CHCl ₃ Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
VERBENACEAE						
<i>Aloysia gratissima</i> Troncoso	Bolivia	DL	95 % EtOH Ext.	<i>In vitro/Plasmodium falciparum</i>	Active	Munoz et al., 2000
<i>Aloysia triphylla</i> L'Hér.	Bolivia	DL	95 % EtOH Ext.	Rat/ <i>Plasmodium vinckei</i>	Active	Munoz et al., 2000
<i>Aloysia virgata</i> (Ruiz & Pav.)	Brazil	*	Hexane Ext.	Rat/ <i>Plasmodium vinckei</i>	Active	Munoz et al., 2000
<i>Avicennia germinans</i> L.	Puerto Rico	DL	95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
<i>Citharexylum fruticosum</i> L.	Puerto Rico	DSm	EtOAc Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
<i>Citharexylum spinosum</i> L.	Puerto Rico	*	95 % EtOH Ext.	Macaca radiata/P. berghei	Inactive	Brandão et al., 1985
<i>Lantana cujabensis</i> Schauer	Peru	DL+ Sm	95 % EtOH Ext.	<i>In vitro/Plasmodium falciparum</i>	Active	Antoun et al., 2001
<i>Stachytarpheta corymbensis</i> Vahl.	Brazil	DBk	H ₂ O Ext.	<i>In vitro/Plasmodium falciparum</i>	Inactive	Antoun et al., 2001
<i>Stachytarpheta dichotoma</i> Vahl	Brazil	*	95 % EtOH Ext.	<i>In vitro/Plasmodium falciparum</i>	Inactive	Antoun et al., 1993
<i>Stachytarpheta rhomboidalis</i> Schauer	Brazil	DEP	H ₂ O Ext.	<i>In vitro/Plasmodium falciparum</i>	Active	Okunade & Lewis, 2004
<i>Tectona grandis</i> L.F.	Puerto Rico	DL	Hexane Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Carvalho et al., 1991
VITACEAE						
<i>Cissus cissoides</i>	Puerto Rico	*	95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
VOCHYSIACEAE						
<i>Qualea grandifolia</i> Mart.	Brazil	*	EtOAc Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
<i>Qualea multiflora</i> Mart.	Brazil	*	Hexane Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
<i>Salvertia convallariaeodora</i> St. Hil.	Brazil	*	Hexane Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
	Brazil	DL	EtOAc Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
	Brazil	DL	95 % EtOH Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Brandão et al., 1985
	Brazil	DL	Hexane Ext.	Mouse/ <i>Plasmodium berghei</i>	Inactive	Carvalho et al., 1991