Network publications

2011-2021

(in alphabetical order of their first authors)

List of Publications within ResNet NPND (March 2021)

Note: Publications in green are directly related to NP and ND. Some further papers not directly related to this field but nevertheless published by two or more authors from the network are shown in grey. Names of ResNet NPND members are underlined.

2021
Barbosa, H.; Costa-Silva, T.A.; Conserva, G.A.A.; Araujo, A.J.; Lordello, A.L.L.; Antar, G.M.; Amaral, M.; Soares, M.G.; Tempone, A.G.; Lago, J.H.G. Aporphine alkaloids from *Ocotea puberula* with anti-*Trypanosoma cruzi* potential – activity of dicentrine-β-N-oxide in the plasma membrane electric potentials. Chemistry & Biodiversity, 8, (2021). https://doi.org/10.1002/cbdv.202001022
Brito, I.A.; Oliveira, E.A.; Chaves, M.H.; Santos, F.T.; Rodrigues-Oliveira, A.F.; Barbosa-Reis, G.; Sartorelli, P.; Oliveira-Silva, D.; Costa-Silva, T.A.; Tempone, A.G.; Lago, J.H.G. Antileishmanial acetylene fatty acid and acetogenins from seeds of *Porcelia macrocarpa*. Journal of the Brazilian Chemical Society, 32, 441-453 (2021). https://doi.org/10.21577/0103-5053.20200197
Conserva, G.A.A.; Quiros-Guerrero, L.M.; Costa-Silva, T.A.; Marcourt, L.; Pinto, E.G.; Tempone, A.G.; Fernandes, J.P.S.; Wolfender, J.L.; Queiroz, E.F.; Lago, J.H.G. Metabolite profile of *Nectandra oppositifolia* Nees & Mart. And assessment of antitrypanosomal activity of bioactive compounds through efficiency analyses. PLoS One, 2, 1, (2021). https://doi.org/10.1371/journal.pone.0247334
Flittner D, Kaiser M, Mäser P, Lopes NP, Schmidt TJ. The Alkaloid Fraction of *Pachysandra terminalis* (Buxaceae) shows prominent Activity against *Trypanosoma brucei rhodesiense*. Molecules 2021, 26, 591. https://doi.org/10.3390/molecules26030591
Parolin, G.A., Gonçalves, G.E.G., Costa-Silva, T.A.; Tempone, A.G.; Lago, J.H.G.; Caseli, L.; Péres, L.O. Evaluation of the effects in cellular membrane models of antitrypanosomal poly-thymolformaldehyde (PTF) using Langmuir monolayers. Biochimica et Biophysica Acta – Biomembranes, 1863, 183500, (2021). https://doi.org/10.1016/j.bbamem.2020.183500
Pollo LAE, Martin EF, Machado VR, Cantillon D, Wildner LM, Bazzo ML, Waddell SJ, Biavatti MW, Sandjo LP. Search for Antimicrobial Activity Among Fifty-Two Natural and Synthetic Compounds Identifies Anthraquinone and Polyacetylene Classes That Inhibit Mycobacterium tuberculosis. Front. Microbiol. 11, 622629 (2021). https://doi.org/10.3389/fmicb.2020.622629
Uth J-F, Börgel F, Lehmkuhl K, Schepmann D, Kaiser M, Nonato MC, Krauth-Siegel L, Schmidt TJ, Wünsch B. Synthesis and biological evaluation of natural product-inspired, aminoalkyl substituted 1-benzopyrans as novel antiplasmodial agents. Accepted/in press.
2020
Barbosa, H.; Silva, R.L.C.G.; Costa-Silva, T.A.; Tempone, A.G.; Antar, G.M.; Lago, J.H.G.; Caseli, L. Interaction of dicentrinone, an antitrypanosomal aporphine alkaloid isolated from *Ocotea puberula* (Lauraceae), in cell membrane models at the air-water interface. Bioorganic Chemistry, 103978, (2020). https://doi.org/10.1016/j.bioorg.2020.103978
Dantas, E.P.; Conceicao, J.M.; Soman, L.; Silva, M.M.R.; Amaral, M.; Tempone, A.G.; Lago, J.H.G., Soares, M.G.; Sartorelli, P. Dereplication of aporphine alkaloids by UHPLC-HR-ESI-MS/MS and NMR

from *Duguetia lanceolata* St.-Hil (Annonaceae) and antiparasitic activity evaluation. Journal of the Brazilian Chemical Society, 1908, (2020). https://doi.org/10.21577/0103-5053.20200089

Londero, V.S.; Costa-Silva, T.A.; Tempone, A.G.; Baitello, J.B.; Lago, J.H.G. Anti-*Trypanosoma cruzi* activity of costic acid isolated from *Nectandra barbellata* (Lauraceae) is associated with alterations in plasma membrane electric and mitochondrial membrane potentials. Bioorganic Chemistry, 95, 103510, (2020). https://doi.org/10.1016/j.bioorg.2019.103510

Monzote L, Gutiérrez Y, Machin L, Staniek K, Scull R, Satyal P, Gille L, Setzer WN. Antileishmanial activity and influence on mitochondria of the essential oil from *Tagetes lucida* Cav. and its main component. Sci Pharm, 2020, 88(3), 31. https://doi.org/10.3390/scipharm88030031

Monzote L, Scherbakov AM, Scull R, Gutiérrez YI, Satyal P, Cos P, Shchekotikhin AE, Gille L, Setzer WN. Pharmacological assessment of the carvacrol chemotype essential oil from *Plectranthus amboinicus* growing in Cuba. Nat Prod Commun, 2020, 15(10), 1934578X20962233. https://doi.org/10.1177/1934578X20962233

Monzote L, Scherbakov AM, Scull R, Satyal P, Cos P, Shchekotikhin AE, Gille L, Setzer WN. Essential oil from *Melaleuca leucadendra*: Antimicrobial, antikinetoplastid, antiproliferative and cytotoxic assessment. Molecules, 2020, 25(23), 5514. https://doi.org/10.3390/molecules25235514

Morais, T.R.; Conserva, G.A.A.; Varela, M.T.; Costa-Silva, T.A.; Santos, F.T.; Fortuna, A.; Ponci, V.; Falcao, A.C.; Tempone, A.G.; Fernandes, J.P.S.; Lago, J.H.G. Improving the drug-likeness of inspiring natural products – evaluation of the antiparasitic activity against *Trypanosoma cruzi* through semi-synthetic and simplified analogues of licarin A. Scientific Reports, 10, 5467, (2020). https://doi.org/10.1038/s41598-020-62352-w

Scharf B, Schmidt TJ, Rabbani S, Dobrindt U, Sendker J, Ernst B, Hensel A. Antiadhesive natural products against uropathogenic *E. coli*: what can we learn from Cranberry extract? J Ethnopharmacol, 2020, 257, 112889. https://doi.org/10.1016/j.jep.2020.112889

Sear, C.E.; Pieper, P.; Amaral, M.; Romanelli, M.M.; Costa-Silva, T.A.; Haugland, M.M.; Tate, J.A.; Lago, J.H.G.; Tempone, A.G.; Anderson, E.A. Synthesis and structure-activity relationship of dehydrodieugenol B neolignans against *Trypanosoma cruzi*. ACS Infectious Diseases, 6, 2872 (2020). https://doi.org/10.1021/acsinfecdis.0c00523

Silva, L.G.; Gomes, K.S.; Costa-Silva, T.A.; Silva, M.M.R.; Tempone, A.G.; Sartorelli, P.; Lago, J.H.G. Calanolides E1 and E2, two related coumarins from *Calophyllum brasiliense* Cambess. (Clusiaceae), displayed activity against amastigote forms of *Trypanosoma cruzi* and *Leishmania infantum*. Natural Product Research, 22, 1-5 (2020). https://doi.org/10.1080/14786419.2020.1765347

Umehara, E.; Costa-Silva, T.A.; Guadagnin, R.C.; Sartorelli, P.; Tempone, A.G.; Lago, J.H.G. Differential lethal action of C17:2 and C17:0 anacardic acid derivatives in *Trypanosoma cruzi* – a mechanistic study. Bioorganic Chemistry, 102, 104068, (2020). https://doi.org/10.1016/j.bioorg.2020.104068

2019

Brito, J.R.; Costa-Silva, T.A.; Tempone, A.G.; Ferreira, E.A.; Lago, J.H.G. Dibenzylbutane neolignans from *Saururus cernuus* L. (Saururaceae) displayed anti-*Trypanosoma cruzi* activity via alterations in

the mitochondrial membrane potential. Fitoterapia, 137, 104251, (2019). https://doi.org/10.1016/j.fitote.2019.104251

Conserva, G.A.A.; Costa-Silva, T.A.; Amaral, M.; Antar, G.M.; Neves, B.J.; Andrade, C.H.; Tempone, A.G.; Lago, J.H.G. Butenolides from *Nectandra oppositifolia* (Lauraceae) displayed anti-*Trypanosoma cruzi* activity via deregulation of mitochondria. Phytomedicine, 54, 302-306 (2019). https://doi.org/10.1016/j.phymed.2018.09.236

42. Costa-Silva, T.A.; Conserva, G.A.A.; Galisteo Junior, A.J.; Tempone, A.G.; Lago, J.H.G. Antileishmanial activity and immunomodulatory effect of secosubamolide, a butanolide isolated from *Nectandra oppositifolia* (Lauraceae). Journal of venomous Animal and Toxins Including Tropical Diseases, 25, 1, (2019). https://doi.org/10.1590/1678-9199-jvatitd-2019-0008

Currier RB, Ulrich K, Leroux AE, Dirdjaja N, Deambrosi M, Bonilla M, Ahmed YL, Adrian L, Antelmann H, Jakob U, Comini MA, Krauth-Siegel RL. An essential thioredoxin-type protein of Trypanosoma brucei acts as redox-regulated mitochondrial chaperone. PLoS Pathog. 2019 Sep 26;15(9):e1008065. https://doi.org/10.1371/journal.ppat.1008065

Ferreira, D.D.; Sousa, F.S.; Costa-Silva, T.A.; Reimão, J.Q.; Torrecilhas, A.C.; Johns, D.M.; Sear, C.E.; Honório, K.M.; Lago, J.H.G.; Anderson, E.A.; Tempone, A.G. Dehydrodieugenol B derivatives as antiparasitic agents: Synthesis and biological activity against *Trypanosoma cruzi*. European Journal of Medicinal Chemistry, 176, 162-174, (2019). https://doi.org/10.1016/j.ejmech.2019.05.001

Gomes, K.S.; Costa-Silva, T.A.; Oliveira, I.H.; Aguilar, A.M.; Oliveira-Silva, D.; Uemi, M.; Silva, W.A.; Melo, L.R.; Andrade, C.K.Z.; Tempone, A.G.; Zanin, J.L.B.; Lago, J.H.G. Structure-Activity relationship study of antitrypanosomal chalcone derivatives using multivariate analysis. Bioorganic and Medicinal Chemistry Letters, 9, 1459-1462 (2019). https://doi.org/10.1016/j.bmcl.2019.04.020

Gonçalves, G.E.G.; Morais, T.R.; Gomes, K.S.; Costa-Silva, T.A.; Tempone, A.G.; Lago, J.H.G., Caseli, L. Antitrypanosomal activity of epi-polygodial from *Drimys brasiliensis* and its effects in cellular membrane models at the air-water interface. Bioorganic Chemistry, 84, 186-190 (2019). https://doi.org/10.1016/j.bioorg.2018.11.048

Grecco, S.S.; Letsyo, E.; Tempone, A.G.; Lago, J.H.G. Jerz, G. Electrospray mass-spectrometry guided target isolation of neolignans from *Nectandra leucantha* (Lauraceae) by high performance and spiral-coil countercurrent chromatography. Journal of Chromatography A, 1608, 460422, (2019). https://doi.org/10.1016/j.chroma.2019.460422

Gutiérrez YI, Scull R, Villa A, Satyal P, Cos P, Monzote L, Setzer WN. Chemical composition, antimicrobial and antiparasitic screening of the essential oil from *Phania matricarioides* (Spreng.) Griseb. Molecules, 2019, 24(8), 1615. https://doi.org/10.3390/molecules24081615

Kimani NM, Backhaus S, Matasyoh JC, Kaiser M, Herrmann FC, Schmidt TJ, Langer K. Preparation of sesquiterpene lactone loaded - PLA nanoparticles and evaluation of their antitrypanosomal activity. Molecules 2019, 24, 2110; https://doi.org/10.3390/molecules24112110

Lemos da Silva LA, Höehr de Moraes M, Scotti MT, Scotti L, de Jesus Souza R, Nantchouang Ouete JL, Biavatti MW, Steindel M, Sandjo LP. Antiprotozoal investigation of 20 plant metabolites on Trypanosoma cruzi and Leishmania amazonensis amastigotes. Atalantoflavone alters the

mitochondrial membrane potential. Parasitology. 2019, 146, 849-856: https://doi.org/10.1017/S0031182019000052

Lenz M, Krauth-Siegel RL, Schmidt TJ. Natural Sesquiterpene Lactones of the 4,15-iso-Atriplicolide Type are Inhibitors of Trypanothione Reductase. Molecules 2019, 24, 3737; https://doi.org/10.3390/molecules24203737

Machín L, Tamargo B, Piñón A, Atíes RC, Scull R, Setzer WN, Monzote L. *Bixa orellana* L. (Bixaceae) and *Dysphania ambrosioides* (L.) Mosyakin & Clemants (Amaranthaceae) essential oils formulated in nanocochleates against *Leishmania amazonensis*. Molecules, 2019, 24(23), 4222. https://doi.org/10.3390/molecules24234222

Monzote L, Herrera I, Satyal P, Setzer WN. In-vitro evaluation of 52 commercially-available essential oils against *Leishmania amazonensis*. Molecules, 2019, 24(7), 1248. https://doi.org/10.3390/molecules24071248

Morais, T.R.; Costa-Silva, T.A.; Ferreira, D.D.; Novais, B.J.; Torrecillas, A.C.; Tempone, A.G.; Lago, J.H.G. Antitrypanosomal activity and effect in plasma membrane permeability of (-)-bornyl *p*-coumarate isolated from *Piper cernuum* (Piperaceae). Bioorganic Chemistry, 89, 103001 (2019). https://doi.org/10.1016/j.bioorg.2019.103001

Nnadi CO, Ebiloma GU, Black JA, Nwodo NJ, Lemgruber L, Schmidt TJ, de Koning HP. Potent Antitrypanosomal Activities of 3-Aminosteroids against African Trypanosomes: Investigation of Cellular Effects and of Cross-Resistance with Existing Drugs. Molecules 2019, 24, 268; https://doi.org/10.3390/molecules24020268

Oliveira, E.A.; Brito, I.A.; Lima, M.L.; Silva, M.M.R.; Moreira-Filho, J.; Neves, B.J.; Andrade, C.H.; Sartorelli, P.; Tempone, A.G.; Costa-Silva, T.A.; Lago, J.H.G. Antitrypanosomal activity of acetogenins isolated from the seeds of *Porcelia macrocarpa* is associated with alterations in both plasma membrane electric potential and mitochondrial membrane potential. Journal of Natural Products, 82, 1177-1183 (2019). https://doi.org/10.1021/acs.jnatprod.8b00890

Sandjo LP, Dos Santos Nascimento MVP, de H Moraes M, Rodrigues LM, Dalmarco EM, Biavatti MW, Steindel M. NOx-, IL-1β-, TNF-α-, and IL-6-Inhibiting Effects and Trypanocidal Activity of Banana (Musa acuminata) Bracts and Flowers: UPLC-HRESI-MS Detection of Phenylpropanoid Sucrose Esters. Molecules. 2019, 24, 4564: https://doi.org/10.3390/molecules24244564

Sandjo LP, Zingue S, Dos Santos Nascimento MV, de Moraes MH, Vicente G, Amoah SK, Dalmarco EM, Frode TS, Creczynski-Pasa TB, Steindel M. Cytotoxicity, antiprotozoal, and anti-inflammatory activities of eight curry powders and comparison of their UPLC-ESI-QTOF-MS chemical profiles. J Sci Food Agric. 2019, 99, 2987-2997; https://doi.org/10.1002/jsfa.951

Silva, M.M.R.; Johns, D.M.; Migotto, A.; Lima, M.L.; Lago, J.H.G.; Tempone, A.G. Antitrypanosomal activity of isololiolide isolated from the marine hydroid *Macrorhynchia philippina* (Cnidaria, Hydrozoa). Bioorganic Chemistry, 89, 103002 (2019). https://doi.org/10.1016/j.bioorg.2019.103002

Téllez J, Romero I, Romanha AJ, Steindel M. Drug transporter and oxidative stress gene expression in human macrophages infected with benznidazole-sensitive and naturally benznidazole-resistant

Trypanosoma cruzi parasites treated with benznidazole. Parasit Vectors. 2019, 12, 262; https://doi.org/10.1186/s13071-019-3485-9

2018

Chibli LA, Schmidt TJ, Nonato MC, Calil FA, Da Costa FB. Natural products as inhibitors of Leishmania major dihydroorotate dehydrogenase. Eur. J. Med. Chem. 2018, 157, 852-866. https://doi.org/10.1016/j.ejmech.2018.08.033

Cos P, Janssens J, Piñón A, Cuesta-Rubio O, Yglesias-Rivera A, Díaz-García A, Vilegas W, Monzote L. Efficacy of Four *Solanum* spp. Extracts in an Animal Model of Cutaneous Leishmaniasis. Medicines 2018, 5, E49; doi:10.3390/medicines5020049

de Carvalho CR, Vieira Mde L, Cantrell CL, Wedge DE, Alves TM, Zani CL, Pimenta RS, Sales Junior PA, Murta SM, Romanha AJ, Rosa CA, Rosa LH. Biological activities of ophiobolin K and 6-epi-ophiobolin K produced by the endophytic fungus Aspergillus calidoustus. Nat Prod Res. 2016, 30, 478-81; https://doi.org/10.1080/14786419.2015.1022777

Ebersoll S, Musunda B, Schmenger T, Dirdjaja N, Bonilla M, Manta B, Ulrich K, Comini MA, Krauth-Siegel RL. A glutaredoxin in the mitochondrial intermembrane space has stage-specific functions in the thermo-tolerance and proliferation of African trypanosomes. Redox Biol. 2018 May;15:532-547. https://doi.org/10.1016/j.redox.2018.01.011

Frankenberger L, D Mora T, de Siqueira CD, Filippin-Monteiro FB, de Moraes MH, Biavatti MW, Steindel M, Sandjo LP. UPLC-ESI-QTOF-MS2 characterisation of Cola nitida resin fractions with inhibitory effects on NO and TNF-α released by LPS-activated J774 macrophage and on Trypanosoma cruzi and Leishmania amazonensis. Phytochem Anal. 2018, 29, 577-589; https://doi.org/10.1002/pca.2771

García J, Escalona JC, da Gama D, Monzote L, de la Vega J, de Macedo MB, Cos P. Antileishmanial Potentialities of *Croton linearis* Leaf Essential Oil. Natural Product Commun 2018, 13, 629-34; doi:10.1177/1934578X1801300527

Gonçalves VN, Cantrell CL, Wedge DE, Ferreira MC, Soares MA, Jacob MR, Oliveira FS, Galante D, Rodrigues F, Alves TM, Zani CL, Junior PA, Murta S, Romanha AJ, Barbosa EC, Kroon EG, Oliveira JG, Gomez-Silva B, Galetovic A, Rosa CA, Rosa LH. Fungi associated with rocks of the Atacama Desert: taxonomy, distribution, diversity, ecology and bioprospection for bioactive compounds. Environ Microbiol. 2016, 18, 232-45; https://doi.org/10.1111/1462-2920.13005

Grecco, S.S.; Costa-Silva, T.A.; Sousa, F.S.; Cargnelutti, S.B.; Umehara, E.; Mendonça, P.S.; Tempone, A.G.; Lago, J.H.G. Neolignans isolated from twigs of *Nectandra leucantha* Ness and Mart (Lauraceae) displayed *in vitro* antileishmanial activity. Journal of Venomous Animals and Toxins Including Tropical Diseases, 24, 27, (2018). https://doi.org/10.1186/s40409-018-0164-9

Grecco, S.S.; Jerz, G.; Lago, J.H.G.; Jones, P. Crystal structure of dehydrodieugenol B methyl ether, a neolignan from *Nectandra leucantha* Nees and Mart (Lauraceae). Acta Crystallographica Section E, Crystallographic Communications, 74, 106, (2018). https://doi.org/10.1107/S2056989018003717

Gutiérrez YI, Scull R, Monzote L, Rodríguez KM, Bello A, Setzer WN. Comparative pharmacognosy, chemical profile and antioxidant activity of extracts from *Phania matricarioides* (Spreng.) Griseb. collected from different localities in Cuba. Plants, 2018, 7(4), 110. https://doi.org/10.3390/plants7040110

Kimani MN, Matasyoh JC, Kaiser M, Brun R, Schmidt TJ. Sesquiterpene lactones from *Vernonia cinerascens* Sch. Bip. and their in vitro antitrypanosomal activity. Molecules 2018, 23, 248; https://doi.org/10.3390/molecules23020248

Kimani NM, Matasyoh JC, Kaiser M, Brun R, Schmidt TJ. Antiprotozoal sesquiterpene lactones and other constituents from *Tarchonanthus camphoratus* and *Schkuhria pinnata*. Journal of Natural Products 2018, 81, 124-130; https://doi.org/10.1021/acs.jnatprod.7b00747

Kimani NM, Matasyoh JC, Kaiser M, Nogueira MS, Trossini GHG, Schmidt TJ. Complementary quantitative structure-activity relationship models for the antitrypanosomal activity of sesquiterpene lactones. International Journal of Molecular Sciences 2018, 19, 3721. https://doi.org/10.3390/ijms19123721

Londero VS, da Costa-Silva TA, Gomes KS, Ferreira DD, Mesquita JT, Tempone AG, Young MCM, Jerz G, Lago JHG. Acetylenic fatty acids from flowers of *Porcelia macrocarpa* (Annonaceae) against trypomastigotes of *Trypanosoma cruzi*: effect of octadec-9-ynoic acid in plasma membrane electric potential. Bioorg. Chem. 2018, 78, 307-311. https://doi.org/10.1016/j.bioorg.2018.03.025

Machado VR, Sandjo LP, Pinheiro GL, Moraes MH, Steindel M, Pizzolatti MG, Biavatti MW. Synthesis of lupeol derivatives and their antileishmanial and antitrypanosomal activities. Nat Prod Res. 2018, 32, 275-281; https://doi.org/10.1080/14786419.2017.1353982

Martin EF, Mbaveng AT, de Moraes MH, Kuete V, Biavatti MW, Steindel M, Efferth T, Sandjo LP. Prospecting for cytotoxic and antiprotozoal 4-aryl-4H-chromenes and 10-aryldihydropyrano[2,3-f]chromenes. Arch Pharm (Weinheim). 2018, 35, e1800100; https://doi.org/10.1002/ardp.201800100

Nnadi CO, Althaus JB, Nwodo NJ, Schmidt TJ. A 3D-QSAR study on the antitrypanosomal and cytotoxic activities of steroid alkaloids by comparative molecular field analysis. Molecules 2018, 23, 1113. https://doi.org/10.3390/molecules23051113

Robledo SM, Vélez ID, Schmidt TJ. Arnica tincture cures cutaneous Leishmaniasis in golden hamsters. Molecules 2018, 23, 150; https://doi.org/10.3390/molecules23010150

Rozo-Lugo C, Cuca-Suárez LE, Schmidt TJ, Coy-Barrera E. Novel Tetrahydrobenzofuran-6(2H)-one-type Neolignans from *Ocotea heterochroma*: their platelet activating factor (PAF) antagonism and In-Silico Insights into PAF-Receptor Binding Mode. J. Nat. Prod. 2018, 81, 1968-1975. https://doi.org/10.1021/acs.jnatprod.8b00189

Schmidt TJ. Structure-activity and activity-activity relationships of sesquiterpene lactones. Chapter 15, pp 349-371. In: Sülsen VP, Martino VS (Editors): Sesquiterpene Lactones Advances in their Chemistry and Biological Aspects. Springer, Cham, Switzerland 2018. ISBN 978-3-319-78273-7 ISBN 978-3-319-78274-4 (eBook). https://doi.org/10.1007/978-3-319-78274-4.

Ueno, A.K.; Barcellos, A.F.; Costa-Silva, T.A.; Mesquita, J.T.; Ferreira, D.D.; Tempone, A.G.; Romoff, P.; Antar, G.M.; Lago, J.H.G. Antitrypanosomal activity and evaluation of the mechanism of action of diterpenes from aerial parts of *Baccharis retusa* (Asteraceae). Fitoterapia, 125, 55, (2018). https://doi.org/10.1016/j.fitote.2017.12.016

2017
Althaus JB, Malyszek C, Kaiser M, Brun R, Schmidt TJ. Alkamides from *Anacyclus pyrethrum* L. and their in vitro antiprotozoal activity. Molecules 2017, 22, 796; https://doi.org/10.3390/molecules22050796
Canuto, G.A.B.; Pimenta, D.C.; Alves, M.J.M.; Farah, J.P.S.; Lago, J.H.G.; Tempone, A.G.; Pinto Junior, E.; Dorr, F.; Tavares, M.F.M. New insights into the mechanistic action of methyldehydrodieugenol B towards *Leishmania (L.) infantum* via a multiplatform based untargeted metabolomics approach. Metabolomics, 13, 56, (2017). https://doi.org/10.1007/s11306-017-1193-z
Dos Santos Grecco S, Costa-Silva TA, de Sousa FS, Mesquita JT, Galuppo MK, Tempone AG, Cunha RLOR, Jerz G, Martins EGA, Uemi M, Lago JHG. Antitrypanosomal activity and evaluation of the mechanism of action of dehydrodieugenol isolated from *Nectandra leucantha* (Lauraceae) and its methylated derivative against *Trypanosoma cruzi*. Phytomedicine 2017, 24, 62–67. https://doi.org/10.1016/j.phymed.2016.11.015
García M, Scull R, Satyal P, Setzer WN, Monzote L. Chemical characterization, antileishmanial activity, and cytotoxicity effects of the essential oil from leaves of *Pluchea carolinensis* (Jacq.) G. Don. (Asteraceae). Phytother Res, 2017, 31(9), 1419-1426. https://doi.org/10.1002/ptr.5869
Grecco, S.S.; Costa-Silva, T.A.; Jerz, G.; Sousa, F.S.; Londero, V.S.; Galuppo, M.K.; Lima, M.L.; Neves, B.J.; Andrade, C.H.; Tempone, A.G.; Lago, J.H.G. Neolignans from leaves of *Nectandra leucantha* (Lauraceae) display in vitro antitrypanosomal activity via plasma membrane and mitochondrial damages. Chemico-Biological Interactions, 277, 55 (2017). https://doi.org/10.1016/j.cbi.2017.08.017
Grecco, S.S.; Costa-Silva, T.A.; Sousa, F.S.; Conserva, G.A.A.; Jerz, G.; Mesquita, J.T.; Galuppo, M.K.; Tempone, A.G.; Neves, B.J.; Andrade, C.H.; Cunha, R.L.O.R., Sartorelli, P.; Lago, J.H.G. Antitrypanosomal activity and evaluation of the mechanism of action of dehydrodieugenol isolated from *Nectandra leucantha* (Lauraceae) and its methylated derivative against *Trypanosoma cruzi*. Phytomedicine, 24, 62, (2017). https://doi.org/10.1016/j.phymed.2016.11.015
Greve HL, Kaiser M, Brun R, Schmidt TJ. Terpenoids from the Oleo-gum-resin of *Boswellia serrata* and their antiplasmodial effects in vitro. Planta Medica 83, 1214-1226 (2017). https://doi.org/https://doi.org/10.1055/s-0043-116943
Kimani NM, Matasyoh JC, Kaiser M, Brun R, Schmidt TJ. Anti-trypanosomatid elemanolide sesquiterpene lactones from *Vernonia lasiopus* O. Hoffm. Molecules 2017, 22, 597; https://doi.org/10.3390/molecules22040597
Monzote L, Scull R, Cos P, Setzer WN. Essential oil from *Piper aduncum*: Chemical analysis, antimicrobial assessment, and literature review. Medicines, 2017, 4(3), 49. https://doi.org/10.3390/medicines4030049
Nnadi CO, Nwodo NJ, Kaiser M, Brun R, Schmidt TJ. Steroid Alkaloids from *Holarrhena africana* with strong activity against *Trypanosoma brucei rhodesiense*. Molecules 2017, 22, 1129; https://doi.org/10.3390/molecules22071129

Pollo LAE, de Moraes MH, Cisilotto J, Creczynski-Pasa TB, Biavatti MW, Steindel M, Sandjo LP. Synthesis and in vitro evaluation of Ca2+ channel blockers 1,4-dihydropyridines analogues against Trypanosoma cruzi and Leishmania amazonensis: SAR analysis. Parasitol Int. 2017, 66, 789-797; https://doi.org/10.1016/j.parint.2017.08.005

Santos, A.L.; Martins, L.F.; Yamamoto, E.S.; Laurenti, M.D.; Lima, M.L.; Passero, L.F.D.; Lago, J.H.G.; Tempone, A.G.; Sartorelli, P. Antileishmanial and immunomodulatory effects of tricin isolated from leaves of *Casearia arborea* (Salicaceae). Chemistry and Biodiversity, 14, e1600458, (2017). https://doi.org/10.1002/cbdv.201600458

Setzer MS, Byler KG, Ogungbe IV, Setzer WN. Natural products as new treatment options for trichomoniasis: A molecular docking investigation. Sci Pharm, 2017, 85(1), 5. https://doi.org/10.3390/scipharm85010005

Steinberg KM, Shrestha S, Dosoky NS, Monzote L, Piñón A, Haber WA, Setzer WN. Cytotoxic and antileishmanial components from the bark extract of *Ruyschia phylladenia* from Monteverde, Costa Rica. Nat Prod Commun, 2017, 12(1), 1-2. https://doi.org/10.1177/1934578X1701200101

Tamargo B, Monzote L, Piñón A, Machín L, García M, Scull R, Setzer WN. In vitro and in vivo evaluation of essential oil from *Artemisia absinthium* L. formulated in nanocochleates against cutaneous leishmaniasis. Medicines, 2017, 4(2), 38. https://doi.org/10.3390/medicines4020038

Téllez J, Romero I, Soares MJ, Steindel M, Romanha AJ. Knockdown of Host Antioxidant Defense Genes Enhances the Effect of Glucantime on Intracellular Leishmania braziliensis in Human Macrophages. Antimicrob Agents Chemother. 2017, 61, e02099-16; https://doi.org/10.1128/AAC.02099-16

Varela, M.T.; Lima, M.L.; Galuppo, M.K.; Tempone, A.G.; Oliveira, A.; Fernandes, J.P.S.; Lago, J.H.G. New alkenyl derivative from *Piper malacophyllum* and analogues: Antiparasitic activity against *Trypanosoma cruzi* and *Leishmania infantum*. Chemical Biology and Drug Design, 90, 1007, (2017). https://doi.org/10.1111/cbdd.12986

Wulsten IF, Costa-Silva TA, Mesquita JT, Lima ML, Galuppo MK, Taniwaki NN, Borborema SET, Da Costa FB, Schmidt TJ, Tempone AG. Investigation of the anti-*Leishmania* (Leishmania) *infantum* activity of some natural sesquiterpene lactones. Molecules, 2017, 22, 685; https://doi.org/10.3390/molecules22050685

2016

Almeida, B.C.; Araujo, B.Q.; Carvalho, A.A.; Freitas, S.D.S.; Maciel, D.A.S.; Ferreira, A.J.S.; Tempone, A.G.; Martins, L.F.; Alexandre, T.R.; Chaves, M.H.; Lago, J.H.G. Antiprotozoal activity of extracts and isolated triterpenoids from carnaúba (*Copernicia prunifera*) wax from Brazil. Pharmaceutical Biology, 254, 3280, (2016). https://doi.org/10.1080/13880209.2016.1224257

Byler KG, Collins JT, Ogungbe IV, Setzer WN. Alphavirus protease inhibitors from natural sources: A homology modeling and molecular docking investigation. Comput Biol Chem, 2016, 64, 163-184. https://doi.org/10.1016/j.compbiolchem.2016.06.005

Byler KG, Ogungbe IV, Setzer WN. In-silico screening for anti-Zika virus phytochemicals. J Mol Graph Model, 2016, 69, 78-91. https://doi.org/10.1016/j.jmgm.2016.08.011

Gutiérrez Y, Montes R, Scull R, Sánchez A, Cos P, Monzote L, Setzer WN. Chemodiversity associated with cytotoxicity and antimicrobial activity of *Piper aduncum* var. *ossanum*. Chem Biodivers, 2016, 13(12), 1715-1719. https://doi.org/10.1002/cbdv.201600133

Lima TC, Souza RJ, Santos AD, Moraes MH, Biondo NE, Barison A, Steindel M, Biavatti MW. Evaluation of leishmanicidal and trypanocidal activities of phenolic compounds from Calea uniflora Less. Nat Prod Res. 2016, 30, 551-7; https://doi.org/10.1080/14786419.2015.1030740

Maciel, D.A.S.; Freitas, V.P.; Conserva, G.A.A.; Alexandre, T.R.; Purisco, S.U.; Tempone, A.G.; Melhem, M.S.C.; Kato, M.J.; Guimarães E.F.; Lago, J.H.G. Bioactivity-guided isolation of laevicarpin, an antitrypanosomal and anticryptococcal lactam from *Piper laevicarpu* (Piperaceae). Fitoterapia, 111, 24, (2016). https://doi.org/10.1016/j.fitote.2016.04.005

Monzote L, Córdova WH, García M, Piñón A, Setzer WN. In-vitro and in-vivo activities of phenolic compounds against cutaneous leishmaniasis. Rec Nat Prod, 2016, 10(3), 269-276. https://www.acgpubs.org/RNP/2016/Volume10/Issue%201/34-RNP-1412-263.pdf

Monzote L, Jiménez J, Cuesta-Rubio O, Márquez I, Gutiérrez Y, da Rocha CQ, Marchi M, Setzer WN, Vilegas W. In vitro assessment of plants growing in Cuba belonging to Solanaceae family against *Leishmania amazonensis*. Phytother Res, 2016, 30(11), 1785-1793. https://doi.org/10.1002/ptr.5681

Nogueira MS, Da Costa FB, Brun R, Kaiser M, Schmidt TJ. ent-Pimarane and ent-Kaurane Diterpenes from *Aldama discolor* (Asteraceae) and their Antiprotozoal Activity. Molecules 2016, 21(9), 1237; https://doi.org/10.3390/molecules21091237

Ogungbe IV, Setzer WN. The potential of secondary metabolites from plants as drugs or leads against protozoan neglected diseases—Part III: In-silico molecular docking investigations. Molecules, 2016, 21(10), 1389. https://doi.org/10.3390/molecules21101389

Sandjo LP, de Moraes MH, Kuete V, Kamdoum BC, Ngadjui BT, Steindel M. Individual and combined antiparasitic effect of six plant metabolites against Leishmania amazonensis and Trypanosoma cruzi. Bioorg Med Chem Lett. 2016, 26,1772-5; https://doi.org/10.1016/j.bmcl.2016.02.044

Satyal P, Crouch RA, Monzote L, Cos P, Awadh Ali NA, Alhaj MA, Setzer WN. The chemical diversity of *Lantana camara*: Analyses of essential oil samples from Cuba, Nepal, and Yemen. Chem Biodivers, 2016, 13(3), 336-342. https://doi.org/10.1002/cbdv.201500271

Silveira N, Saar J, Santos ADC, Barison A, Sandjo LP, Kaiser M, Schmidt TJ, Biavatti MW. A New Alkamide with an Endoperoxide Structure from Acmella ciliata (Asteraceae) and Its in Vitro Antiplasmodial Activity. Molecules 2016, 21, 765-; https://doi.org/10.3390/molecules21060765

Sun YN, No JH, Lee GY, Li W, Yang SY, Yang G, Schmidt TJ, Kang JS, Kim YH. Phenolic Constituents of Medicinal Plants with Activity against Trypanosoma brucei. Molecules 2016, 21, 480; https://doi.org/10.3390/molecules21040480

Varela, MT; Dias, RZ; Martins, LF; Ferreira, DD; Tempone, AG; Ueno, AK. Lago, JHG, Fernandes, JPS. Gibbilimbol analogues as antiparasitic agents – Synthesis and biological activity against *Trypanosoma cruzi* and *Leishmania (L.) infantum*. Bioorganic and Medicinal Chemistry Letters, 2016, 26, 1180. https://doi.org/10.1016/j.bmcl.2016.01.040
2015
Campos FF, Sales Junior PA, Romanha AJ, Araújo MS, Siqueira EP, Resende JM, Alves TM, Martins-Filho OA, Santos VL, Rosa CA, Zani CL, Cota BB. Bioactive endophytic fungi isolated from Caesalpinia echinata Lam. (Brazilwood) and identification of beauvericin as a trypanocidal metabolite from Fusarium sp. Mem Inst Oswaldo Cruz. 2015, 110, 65-74; https://doi.org/10.1590/0074-02760140243
Costa-Silva, T.A.; Grecco, S.S.; Sousa, F.S.; Lago, J.H.G.; Martins, E.G.A.; Terrazas, C.A.; Varikuti, S.; Owens, K.L.; Beverley, S.M.; Satoskar, A.R.; Tempone, A.G. Immunomodulatory and antileishmanial activity of phenylpropanoid dimers isolated from *Nectandra leucantha*. Journal of Natural Products, 78, 653, (2015). https://doi.org/10.1021/np500809a
Cuesta-Rubio O, Oubada A, Bello A, Maes L, Cos P, Monzote L. Antimicrobial assessment of resins from Calophyllum antillanum and Calophyllum inophyllum. Phytother Res 2015, 29, 1991-4; doi:10.1002/ptr.5506
Ellendorff T, Brun R, Kaiser M, Schmidt TJ, Sendker J. PLS-Prediction and Confirmation of Hydrojuglone Glucoside as the Antitrypanosomal Constituent of Juglans Spp. Molecules 20, 10082-10094 (2015). https://doi.org/10.3390/molecules200610082
Godinho VM, Gonçalves VN, Santiago IF, Figueredo HM, Vitoreli GA, Schaefer CE, Barbosa EC, Oliveira JG, Alves TM, Zani CL, Junior PA, Murta SM, Romanha AJ, Kroon EG, Cantrell CL, Wedge DE, Duke SO, Ali A, Rosa CA, Rosa LH. Diversity and bioprospection of fungal community present in oligotrophic soil of continental Antarctica. Extremophiles. 2015, 19, 585-96; https://doi.org/10.1007/s00792-015-0741-6
Herrmann FC, Lenz M, Jose J, Kaiser M, Brun R, Schmidt TJ. In silico identification and in vitro activity of novel natural inhibitors of Trypanosoma brucei Glyceraldehyde-3-phosphate-dehydrogenase. Molecules 20, 16154-16169 (2015); https://doi.org/10.3390/molecules200916154
Llurba Montesino N, Kaiser M, Brun R, Schmidt TJ. Search for antiprotozoal activity in herbal medicinal preparations; new natural leads against neglected tropical diseases. Molecules 20, 14118-14138 (2015); https://doi.org/10.3390/molecules200814118
Oliveira TB, Gobbo-Neto L, Schmidt TJ, Da Costa FB. Study of chromatographic retention of natural terpenoids by chemoinformatic tools. J. Chem. Inf. Model. 55, 26-38 (2015). https://doi.org/10.1021/ci500581q
Pastor J, García M, Steinbauer S, Setzer WN, Scull R, Gille L, Monzote L. Combinations of ascaridole, carvacrol, and caryophyllene oxide against *Leishmania*. Acta Tropica, 2015, 145, 31-38. https://doi.org/10.1016/j.actatropica.2015.02.002

Plöger M, Sendker J, Langer K, Schmidt TJ. Covalent modification of human serum albumin by the natural sesquiterpene lactone parthenolide. Molecules 20, 6211-6223 (2015). https://doi.org/10.3390/molecules20046211

Pulivarthi D, Steinberg KM, Monzote L, Piñón A, Setzer WN. Antileishmanial activity of compounds isolated from *Sassafras albidum*. Nat Prod Commun, 2015, 10(7), 1229-1230. https://doi.org/10.1177/1934578X1501000723

Romero I, Téllez J, Romanha AJ, Steindel M, Grisard EC. Upregulation of Cysteine Synthase and Cystathionine β-Synthase Contributes to Leishmania braziliensis Survival under Oxidative Stress. Antimicrob Agents Chemother. 2015, 59, 4770-81; https://doi.org/10.1128/AAC.04880-14

Santos, L.A.; Cavalheiro, A.J.; Tempone, A.G.; Correa, D.S.; Alexandre, T.R.; Quintiliano, N.F.; Rodrigues-Oliveira, A.F.; Martins, R.C.C.; Lago, J.H.G. Antitrypanosomal acetylene fatty acids derivatives from the seeds of *Porcelia macrocarpa* (Annonaceae). Molecules, 20, 8168 (2015). https://doi.org/10.3390/molecules20058168

Thao NP, Luyen BTT, Brun R, Kaiser M, Kiem PV, Minh CV, Schmidt TJ, Kang JS, Kim YH. Anti-protozoal Activities of Cembrane-Type Diterpenes from Vietnamese Soft Corals. Molecules 20, 12459-12468 (2015). https://doi.org/10.3390/molecules200712459

2014

Althaus JB, Jerz G, Winterhalter P, Kaiser M, Brun R, Schmidt TJ. Antiprotozoal activity of *Buxus sempervirens* and activity-guided isolation of *O*-tigloyl-cyclovirobuxeine-B as main constituent active against *Plasmodium falciparum*. Molecules 19, 6184-6201 (2014). https://doi.org/10.3390/molecules19056184

Althaus JB, Kaiser M, Brun R, Schmidt TJ. Antiprotozoal activity of *Achillea ptarmica* (Asteraceae) and its main alkamide constituents. Molecules 19, 6428-6438 (2014). https://doi.org/10.3390/molecules19056428

Barrosa, K.H.; Pinto, E.G.; Tempone, A.G.; Martins, E.G.A.; Lago, J.H.G. Alchornedine, a new anti-trypanosomal guanidine alkaloid from *Alchornea glandulosa*. Planta Medica, 80, 1310, (2014). https://doi.org/10.1055/s-0034-1382994

Bou, D.D.; Tempone, A.G.; Pinto, E.G.; Lago, J.H.G.; Sartorelli, P. Antiparasitic activity and effect of casearins isolated from *Casearia sylvestris* on *Leishmania* and *Trypanosoma cruzi* plasma membrane. Phytomedicine, 21, 676, (2014). https://doi.org/10.1016/j.phymed.2014.01.004

DalPicolo, C.R.; Bezerra, M.P.; Gomes, K.S.; Passero, L.F.D.; Laurenti, M.D.; Martins, E.G.A.; Sartorelli, P.; Lago, J.H.G. Antileishmanial activity evaluation of adunchalcone, a new prenylated dihydrochalcone from *Piper aduncum* L. Fitoterapia, 97, 28, (2014). https://doi.org/10.1016/j.fitote.2014.05.009

Frión-Herrera Y, Díaz-García A, Rodríguez-Sánchez H, Ruiz-Fuentes JL, Monzote Fidalgo L, Setzer WN. Cytotoxic effect of Cuban propolis extracts on normal cells and in-vitro basal toxicity assay to estimate acute oral toxicity. Am J Essent Oils Nat Prod, 2014, 2(1), 19-23. https://www.essencejournal.com/pdf/2014/vol2issue1/PartA/14-932.pdf

Furbino LE, Godinho VM, Santiago IF, Pellizari FM, Alves TM, Zani CL, Junior PA, Romanha AJ, Carvalho AG, Gil LH, Rosa CA, Minnis AM, Rosa LH. Diversity patterns, ecology and biological activities of fungal communities associated with the endemic macroalgae across the Antarctic peninsula. Microb Ecol. 2014, 67, 775-87; https://doi.org/10.1007/s00248-014-0374-9

García M, Scull R, Cuesta O, Boulet G, Maes L, Cos P, Monzote L. Bioassay-guided in vitro study of the antileishmanial and cytotoxic properties of Bixa orellana seed extract. J Coastal Life Med 2014, 2, 484-9; doi:10.12980/jclm.2.2014apjtb-2014-0074

Grecco, S.S.; Felix, M.J.P., Lago, J.H.G.; Pinto, E.G.; Tempone, A.G.; Romoff, P.; Ferreira, M.J.P.; Sartorelli, P. Anti-trypanossomal phenolic derivatives from *Baccharis uncinella*. Natural Product Communications, 9, 171, (2014). https://doi.org/10.1177/1934578X1400900210

Hiller C, Nissen A, Benítez D, Comini MA, Krauth-Siegel RL. Cytosolic peroxidases protect the lysosome of bloodstream African trypanosomes from iron-mediated membrane damage. PLoS Pathog. 2014 Apr 10;10(4):e1004075. https://doi.org/10.1371/journal.ppat.1004075.

Lima LARS, Alves TMA, Zani CL, Sales Júnior PA, Romanha AJ, Johann S, Cisalpino PS, Pimenta LPS, Boaventura MAD. In vitro cytotoxic, antifungal, trypanocidal and leishmanicidal activities of acetogenins isolated from Annona cornifolia A. St. -Hil. (Annonaceae). An Acad Bras Cienc. 2014, 86,829-839; https://doi.org/10.1590/0001-3765201420130048

Montrieux E, García M, Perera W, Maes L, Cos P, Monzote L. In vitro and in vivo activity of major constituents from Pluchea carolinensis against Leishmania amazonensis. Parasitol Res 2014, 113, 2925-32; doi:10.1007/s00436-014-3954-1

Monzote L, García M, Scull R, Cuellar A, Setzer WN. Antileishmanial activity of the essential oil from *Bixa orellana*. Phytother Res, 2014, 28(5), 753-758. https://doi.org/10.1002/ptr.5055

Monzote L, Piñón A, Scull R, Setzer WN. Chemistry and leishmanicidal activity of the essential oil from *Artemisia absinthium* from Cuba. Nat Prod Commun, 2014, 9(12), 1799-1804. https://doi.org/10.1177/1934578X1400901236

Monzote L, Piñón A, Setzer WN. Antileishmanial potential of tropical rainforest plant extracts. Medicines, 2014, 1(1), 32-55. https://doi.org/10.3390/medicines1010032

Morais, T.R.; Costa-Silva, T.A.; Tempone, A.G.; Borborema, S.E.T.; Scotti, M.T.; Souza, R.M.F.; Araujo, A., Oliveira, A.; Morais, S.; Sartorelli, P.; Lago, J.H.G. Antiparasitic Activity of Natural and Semi-Synthetic Tirucallane triterpenoids from *Schinus terebinthifolius* (Anacardiaceae): Structure/Activity Relationship. Molecules, 19, 5761, (2014). https://doi.org/10.3390/molecules19055761

Ogungbe IV, Erwin WR, Setzer WN. Antileishmanial phytochemical phenolics: Molecular docking to potential protein targets. J Mol Graph Model, 2014, 48, 105-117. https://doi.org/10.1016/j.jmgm.2013.12.010

Pinto EG, Santos IO, Schmidt TJ, Borborema SET, Ferreira VF, da Rocha DR, Tempone AG. Potential of 2-hydroxy-3-phenylsulfanylmethyl-[1,4]-naphthoquinones against *Leishmania infantum*: Biological activity and structure-activity relationships. PLoS ONE 9(8): e105127. https://doi.org/10.1371/journal.pone.0105127

Romero I, Téllez J, Yamanaka LE, Steindel M, Romanha AJ, Grisard EC. Transsulfuration is an active pathway for cysteine biosynthesis in Trypanosoma rangeli. Parasit Vectors. 2014, 24, 197; https://doi.org/10.1186/1756-3305-7-197

Schmidt TJ, Da Costa FB, Lopes NP, Kaiser M, Brun R. *In silico* prediction and experimental evaluation of furanoheliangolide sesquiterpene lactones as potent agents against *Trypanosoma brucei rhodesiense*. Antimicrob. Agents Chemother. 58, 325-332 (2014). https://doi.org/10.1128/AAC.01263-13

Stoco PH, Wagner G, Talavera-Lopez C, Gerber A, Zaha A, Thompson CE, Bartholomeu DC, Lückemeyer DD, Bahia D, Loreto E, Prestes EB, Lima FM, Rodrigues-Luiz G, Vallejo GA, Filho JF, Schenkman S, Monteiro KM, Tyler KM, de Almeida LG, Ortiz MF, Chiurillo MA, de Moraes MH, Cunha Ode L, Mendonça-Neto R, Silva R, Teixeira SM, Murta SM, Sincero TC, Mendes TA, Urmenyi TP, Silva VG, DaRocha WD, Andersson B, Romanha AJ, Steindel M, de Vasconcelos AT, Grisard EC. Genome of the avirulent human-infective trypanosome--Trypanosoma rangeli. PLoS Negl Trop Dis. 2014 Sep 18;8(9):e3176. https://doi.org/10.1371/journal.pntd.0003176

Thao NP, No JH, Yang GS, Byun SY, Goon JH, Luyen BTT, Cuong NX, Nam NH, Minh CV, Schmidt TJ, Kang JS, Kim YH. Secondary Metabolites from Vietnamese Marine Invertebrates with Activity Against *Trypanosoma brucei* and *T. cruzi*. Molecules 19, 7869-7880 (2014). https://doi.org/10.3390/molecules19067869

Warfield J, Setzer WN, Ogungbe IV. Interactions of antiparasitic sterols with sterol 14α-demethylase (CYP51) of human pathogens. SpringerPlus, 2014, 3(1), 679. https://doi.org/10.1186/2193-1801-3-679

2013

Adebajo AC, Ayoola MD, Odediran SA, Aladesanmi AJ, Schmidt TJ, Verspohl EJ. Evaluation of ethnomedical claim III: anti-hyperglycemic activities of *Gongronema latifolium* root and stem. J. Diabetes. 5, 336-343 (2013). https://doi.org/10.1111/1753-0407.12019

Adebajo AC, Odediran SA, Nneji CM, Iwalewa EO, Rukunga GM, Aladesanmi AJ, Gathirwa JW, Ademowo OG, Olugbade TA, Schmidt TJ, Verspohl EJ. Evaluation of Ethnomedical Claims II: Antimalarial Activities of *Gongronema latifolium* Root and Stem. *Journal of Herbs, Spices & Medicinal Plants*, 19, 97–118 (2013). https://doi.org/10.1080/10496475.2012.734012

Arakawa NS, Gobbo-Neto L, Ambrosio SR, Ausech Antonucci G, Vilela Sampaio S, Tallarico Pupo M, Said S, Schmidt TJ, Da Costa FB. Unusual biotransformation products of the sesquiterpene lactone budlein A by *Aspergillus* species. Phytochemistry 96, 92-100 (2013). https://doi.org/10.1016/j.phytochem.2013.09.022

Comini MA, Krauth-Siegel RL, Bellanda M. Mono- and dithiol glutaredoxins in the trypanothione-based redox metabolism of pathogenic trypanosomes. Antioxid Redox Signal. 2013 Sep 1;19(7):708-22. https://doi.org/10.1089/ars.2012.4932

Frion-Herrera Y, Diaz-Garcia A, Rodríguez-Sanchez H, Ruiz-Fuentes J, Monzote-Fidalgo L, Morier-Diaz L, Setzer WN. Cytotoxic effect of Cuban propolis extracts against tumor cells lines. Am J Essent Oils Nat Prod, 2013, 1(1), 112-117. https://www.essencejournal.com/vol1/issue1/pdf/5.11.pdf

Godinho VM, Furbino LE, Santiago IF, Pellizzari FM, Yokoya NS, Pupo D, Alves TM, Junior PA, Romanha AJ, Zani CL, Cantrell CL, Rosa CA, Rosa LH. Diversity and bioprospecting of fungal communities associated with endemic and cold-adapted macroalgae in Antarctica.

ISME J. 2013, 7, 1434-51; https://doi.org/10.1038/ismej.2013.77

Harel D, Schepmann D, Prinz H, Brun R, Schmidt TJ, Wünsch B. Enantioselective synthesis of encecaline-derived potent antimalarial agents. *Org. Biomol. Chem.* 11, 7342-7349 (2013). https://doi.org/10.1039/C3OB41583J

Harel D, Schepmann D, Prinz H, Brun R, Schmidt TJ, Wünsch B. Natural product derived antiprotozoal agents: Synthesis, biological evaluation and structure-activity relationships of novel chromene and chromane derivatives. *J. Med. Chem.* 56, 7442-7448 (2013). https://doi.org/10.1021/jm401007p

Manta B, Pavan C, Sturlese M, Medeiros A, Crispo M, Berndt C, Krauth-Siegel RL, Bellanda M, Comini MA. Iron-sulfur cluster binding by mitochondrial monothiol glutaredoxin-1 of Trypanosoma brucei: molecular basis of iron-sulfur cluster coordination and relevance for parasite infectivity. Antioxid Redox Signal. 2013 Sep 1;19(7):665-82. https://doi.org/10.1089/ars.2012.4859

Ogungbe IV, Ng JD, Setzer WN. Interactions of antiparasitic alkaloids with *Leishmania* protein targets: a molecular docking analysis. Future Med Chem, 2013, 5(15), 1777-1799. https://doi.org/10.4155/fmc.13.114

Ogungbe IV, Setzer WN. *In-silico Leishmania* target selectivity of antiparasitic terpenoids. Molecules, 2013, 18(7), 7761-7847. https://doi.org/10.3390/molecules18077761

Rea, A.; Tempone, A.G.; Pinto, E.G.; Mesquita, J.T.; Silva, L.G.; Rodrigues, E.; Sartorelli, P.; Lago, J.H.G. Soulamarin isolated from *Calophyllum brasiliense* (Clusiaceae) induces plasma membrane permeabilization of *Trypanosoma cruzi* and mitochondrial dysfunction. PloS Neglected Tropical Disease, 7, e2556, (2013). https://doi.org/10.1371/journal.pntd.0002556

Schomburg C, Schuehly W, Da Costa FB, Klempnauer KH, Schmidt TJ. Natural sesquiterpene lactones as inhibitors of Myb-dependent gene expression: Structure-activity relationships. *Eur. J. Med. Chem.* 63, 313-320 (2013). https://doi.org/10.1016/j.ejmech.2013.02.018

2012

Gökbulut, A., Kaiser, M., Brun, R. Sarer, E., Schmidt, T.J. 9β-Hydroxyparthenolide esters from *Inula montbretiana* DC. and their antiprotozoal activity. *Planta Med.* 78, 225-229 (2012).

Grecco, S.S.; Reimão, J.Q.; Tempone, A.G.; Sartorelli, P.; Cunha, R.L.O.R.; Romoff, P.; Ferreira, M.J.P.; Favero, O.A.; Lago, JHG. *In vitro* antileishmanial and antitrypanosomal activities from flavanones from *Baccharis retusa* DC. (Asteraceae). Experimental Parasitology, 130, 141, (2012). https://doi.org/10.1016/j.exppara.2011.11.002

Monzote L, Alarcón O, Setzer WN. Antiprotozoal activity of essential oils. Agric Conspect Sci, 2012, 77(4), 167-775. URL: https://hrcak.srce.hr/97500

Morais, T.R.; Romoff, P.; Favero, O.A.; Reimão, J.Q.; Lourenço; W.C.; Tempone, A.G.; Hristov, D.; Disanti, S.M.; Lago, J.H.G.; Sartorelli, P.; Ferreira, M.J.P. Anti-malarial, anti-trypanosomal and anti-

leishmanial activities of jacaranone isolated from *Pentacalia desiderabilis* Vell. Cuatrec. (Asteraceae). Parasitology Research, 110, 95, (2012). https://doi.org/10.1007/s00436-011-2454-9

Ogungbe IV, Singh M, Setzer WN. Antileishmanial natural products from plants. In: Studies in Natural Products Chemistry, 2012, 36, 331-382. https://doi.org/10.1016/B978-0-444-53836-9.00027-X

Oliveira, A.; Mesquita, J.T.; Lago, J.H.G.; Tempone, A.G.; Guimarães, E.F.; Kato, M.J. Leishmanicidal activity of an alkenylphenol from *Piper malacophyllum* is related to plasma membrane disruption. Experimental Parasitology, 132, 383, (2012). https://doi.org/10.1016/j.exppara.2012.08.019

Santiago IF, Alves TM, Rabello A, Sales Junior PA, Romanha AJ, Zani CL, Rosa CA, Rosa LH. Leishmanicidal and antitumoral activities of endophytic fungi associated with the Antarctic angiosperms Deschampsia antarctica Desv. and Colobanthus quitensis (Kunth) Bartl.

Extremophiles. 2012, 16, 95-103; https://doi.org/10.1007/s00792-011-0409-9

43. Santos, R.T.F.; Hiramoto, L.L.; Lago, J.H.G.; Tempone, A.G.; Sartorelli, P. Anti-trypanosomal activity of 1,2,3,4,6-penta-O-galloyl-β-D-glucose isolated from *Plectranthus barbatus* Andrews (Lamiaceae). Quimica Nova, 35, 2229 (2012). https://doi.org/10.1590/S0100-40422012001100025

Sartorelli, P.; Santana, J.S.; Guadagnin, R.C.; Pinto, E.G.; Tempone, A.G.; Stefani, H.A.; Soares, M. G.; Silva, A. M.; Lago, J.H.G. *In vitro* trypanocidal evaluation of pinane derivatives from essential oils of ripe fruits from *Schinus terebinthifolius* Raddi (Anacardiaceae). Química Nova, 35, 743-747, (2012). http://dx.doi.org/10.1590/S0100-40422012000400017

Schmidt TJ, Khalid SA, Romanha AJ, Alves TMA, Biavatti MW, Brun R, Da Costa FB, de Castro SL, Ferreira VF, de Lacerda MVG, Lago JHG, Leon LL, Lopes NP, das Neves Amorim RC, Niehues M, Ogungbe IV, Pohlit AM, Scotti MT, Setzer WN, Soeiro M de NC, Steindel M, Tempone AG. The potential of secondary metabolites from plants as drugs or leads against protozoan neglected diseases – *Part I. Current Med. Chem.* 19, 2128-2175 (2012). https://doi.org/10.2174/092986712800229023

Schmidt TJ, Khalid SA, Romanha AJ, Alves TMA, Biavatti MW, Brun R, Da Costa FB, de Castro SL, Ferreira VF, de Lacerda MVG, Lago JHG, Leon LL, Lopes NP, das Neves Amorim RC, Niehues M, Ogungbe IV, Pohlit AM, Scotti MT, Setzer WN, Soeiro M de NC, Steindel M, Tempone AG. The potential of secondary metabolites from plants as drugs or leads against protozoan neglected diseases – *Part II. Current Med. Chem.* 19, 2176-2228 (2012). https://doi.org/10.2174/092986712800229087

Schmidt TJ, Klaes M, Sendker J. Lignans in seeds of *Linum* species. *Phytochemistry* 82 89–99 (2012). https://doi.org/10.1016/j.phytochem.2012.07.004

Schmidt TJ, Rzeppa S, Kaiser M, Brun R. *Larrea tridentata* – Absolute configuration of its epoxylignans and investigations on its antiprotozoal activity. *Phytochem. Lett.,* 5 632–638 (2012). https://doi.org/10.1016/j.phytol.2012.06.011

2011

Corrêa, D.S., Tempone, A.G., Reimão, J.Q., Taniwaki, N.N., Romoff, P., Fávero, O.A., Sartorelli, P., Mecchi, M.C., Lago, J.H.G. Anti-leishmanial and anti-trypanosomal potential of polygodial isolated

from stem barks of Drimys brasiliensis Miers (Winteraceae). Parasitology Research, 109, 231-236 (2011). https://doi.org/10.1007/s00436-010-2229-8

Harel, D., Khalid, S. A., Kaiser, M., Brun, R., Wünsch, B., Schmidt, T.J., Encecalol angelate, an unstable chromene from *Ageratum conyzoides* L.: Total Synthesis and Investigation of its Antiprotozoal Activity. *J. Ethnopharmacol.* 137, 620-625 (2011). https://doi.org/10.1016/j.jep.2011.06.015

Hensel, A., Maas, M., Sendker, J., Lechtenberg, M., Petereit, F., Deters, A., Schmidt T.J., Stark, T. *Eupatorium perfoliatum* L.: Phytochemistry, traditional use and current applications. *J. Ethnopharmacol.* 138, 641-651 (2011). https://doi.org/10.1016/j.jep.2011.10.002

Maas, M., Hensel, A., da Costa, F.B., Brun, R., Kaiser, M., Schmidt, T.J. An unusual dimeric guaianolide with antiprotozoal activity and further sesquiterpene lactones from *Eupatorium perfoliatum. Phytochemistry* 72, 635-644 (2011). https://doi.org/10.1016/j.phytochem.2011.01.025

Monzote L, Nance MR, García M, Scull R, Setzer WN. Comparative chemical, cytotoxicity and antileishmanial properties of essential oils from *Chenopodium ambrosioides*. Nat Prod Commun, 2011, 6(2), 281-286. https://doi.org/10.1177/1934578X1100600232

Ogungbe IV, Hill GM, Crouch RA, Vogler B, Nagarkoti M, Haber WA, Setzer WN. Prenylated isoflavonoids from *Rhynchosia edulis*. Nat Prod Commun, 2011, 6(11), 1637-1644. https://doi.org/10.1177/1934578X1100601119

Roldán A, Comini MA, Crispo M, Krauth-Siegel RL. Lipoamide dehydrogenase is essential for both bloodstream and procyclic Trypanosoma brucei. Mol Microbiol. 2011 Aug;81(3):623-39. https://doi.org/10.1111/j.1365-2958.2011.07721.x

Schmidt, T.J., Kaiser, M., Brun, R. Complete structural assignment of Serratol, a cembrane type diterpene from *Boswellia serrata*, and evaluation of its antiprotozoal activity. *Planta Med.* 77, 849-850 (2011). https://doi.org/10.1055/s-0030-1250612

Dedicated to the memory of Alvaro J. Romanha, co-founder, South American coordinator and honorary member of ResNet NPND, who left us far too early in March 2020.