

Trypanocidal function of Terminalia catappa leaf extract in Albino rat

Deborah Adebukola Oloruntola, Ebenezer Oluyemi Dada, Muftau Kolawole Oladunmoye

References

- ABDULLAHI, A.M., et al. (2019). Effects of trypanosomiasis on hemogram and some biochemical parameters of guinea pigs experimentally infected with *Trypanosoma brucei brucei* in Maiduguri, Nigeria. *GSC Biological and Pharmaceutical Sciences*, 07(01), 062-074.
- AKINSEYE, O.R. et al. (2020). Biochemical indicators in trypanosomiasis infections. *Journal of Analytical and Pharmaceutical Research*, 9 (1), 11-14.
- AMEENAH, G. & MOHAMAD, F.M. (2013). African flora as potential sources of medicinal plants: Towards the chemotherapy of major parasitic and other infectious diseases—A review. *Jordan Journal of Biological Science*, 6,77–84.
- BAKER, N. et al. (2013). Drug resistance in African trypanosomiasis: the melarsoprol and pentamidine story. *Trends in Parasitology*, 29(3). doi: [10.1016/j.pt.2012.12.005](https://doi.org/10.1016/j.pt.2012.12.005)
- BOADA-SUCRE, A.A. et al. (2016). *Trypanosoma vivax* adhesion to red blood cells in experimentally infected sheep. *Pathology Research International*, 2016. doi: [10.1155/2016/4503214](https://doi.org/10.1155/2016/4503214).
- BOUAYAD, N. et al. (2012). Dietary effects of harmine, a β -carboline alkaloid, on development, energy reserves and α -amylase activity of *Plodia interpunctella* Hübner (Lepidoptera: Pyralidae). *Saudi Journal of Biological Science*, 19(1),73-80.
- BOUTEILLE, B., & BUGUET, A. (2012). The detection and treatment of human African trypanosomiasis. *Research and Report in Tropical Medicine*, 3, 35-45.
- CAYLA, M. et al. (2019). African trypanosomes. *Parasites and Vectors*, 12, 190. <https://doi.org/10.1186/s13071-019-3355-5>.
- DADA, E.O. & OLORUNTOLA, D.A. (2016). *In vivo* Antiplasmodial activity of ethanolic leaf extract of *Tithonia diversifolia* (Hemsl.) A.Gray against *Plasmodium berghei* Nk65 in infected Swiss Albino mice. *Journal of Applied Life Sciences International*, 8(3),1-8.
- EZEONU, C.S. & EJIKEME, C.M. (2016). Qualitative and quantitative determination of phytochemical contents of indigenous Nigerian softwoods. *New Journal of Science*, 2016,1-9. <https://doi.org/10.1155/2016/5601327>
- GIORDANI, F, et al. (2016). The animal trypanosomiasis and their chemotherapy: a review. *Parasitology*,143(14),1862-1889.
- LIU, J. et al. (2016). Components characterization of total tetraploid jiaogulan (*Gynostemma pentaphyllum*) saponin and its cholesterol-lowering properties. *Journal of Functional Foods*, 23,542-555. doi:10.1016/j.jff.2016.03.013
- MADAKI, F.M. et al. (2016). Phytochemical analysis and in-vitro anti-trypanosomal activity of selected medicinal plants in Niger State, Nigeria. *International Journal of Biochemistry Research and Review*, 11(3), 1-7.
- MANN, A. et al. (2011). In vivo anti-trypanosomal effects of some ethnomedicinal plants from Nupeland of North Central Nigeria. *African Journal of Traditional, Complementary and Alternative Medicine*, 8(1), 15-21. doi: [10.4314/ajtcam.v8i1.60486](https://doi.org/10.4314/ajtcam.v8i1.60486).
- MAROYI, A. & SEMENYA, S.S. (2019). Medicinal uses, phytochemistry and pharmacological properties of *Elaeodendron transvalense*. *Nutrients*, 11(3), 545. doi: 10.3390/nu11030545.
- MASHI, J.A. et al. (2019). Biochemical indices and haematological studies of Ethyl acetate extract of *Persea Americana* leaf in Albino rats. *Asian Journal of Research in Biochemistry*, 4(4), 1-10.
- MBAYA, A. et al. (2012). The mechanism of anaemia in trypanosomiasis: a review, in: Silverberg D., editor. *Anemia*. In Tech. Pp. 269–282.
- MERGIA, E. et al. (2014). Evaluation of in vivo Antitrypanosomal activity of aqueous and methanol leaf extracts of *Clusia abyssinica* (Euphorbiaceae) against *Trypanosoma congolense*. *Austin Journal of Pharmacology and Therapeutics*, 2 (2014), 9-14.
- NDUNG'U, K. et al. (2020). Differential virulence of *Trypanosoma brucei rhodesiense* isolates does not influence the outcome of treatment with anti-trypanosomal drugs in the mouse model. *Plos One*, 15(11), pp. e0229060.
- NWODO, N. et al. (2015a). Evaluation of the *in vitro* trypanocidal activity of methylated flavonoid constituents of *Vitex simplicifolia* leaves. *BMC Complement. Alternative Medicine*, 15, 82. doi: 10.1186/s12906-015-0562-2.

NWODO, N.J. et al. (2015b) Anti-trypanosomal activity of Nigerian plants and their constituents. *Molecules*, 20,7750-7771.

OJELEYE, F.S. et al. (2020). Assessment of *in vivo* anti-trypanosomal effects of *Terminalia catappa* leaf extract and fractions on *Trypanosoma brucei brucei*. *Archives of Veterinary Science and Medicine*, 3(3), 76-82.

OLORUNTOLA, D.A. et al. (2021). *In-vitro* trypanocidal activity of ethanolic and aqueous extracts of *Terminalia catappa* leaf. *Dysona-Life Science*, 2(2021), 25-32. <https://dx.doi.org/10.30493/dls.2021.277935>

OLORUNTOLA, O.D. et al. (2016). Effect of feeding broiler chicken with diets containing *Alchornea cordifolia* leaf meal and enzyme supplementation. *Archivos de Zootecnia*, 65(252),489-498.

OLORUNTOLA, O.D. et al. (2018) Neem, pawpaw, and bamboo leaf meal dietary supplementation in broiler chickens: Effect on performance and health status. *Journal of Food Biochemistry*, 42(2) e12723.

PANCHE, A.N. et al. (2016) Flavonoids: an overview. *Journal of Nutritional Science*, 5,e47.
doi: [10.1017/jns.2016.41](https://doi.org/10.1017/jns.2016.41).

STIJLEMANS, B. et al. (2018). African Trypanosomiasis-Associated Anemia: The Contribution of the Interplay between Parasites and the Mononuclear Phagocyte System. *Frontiers in Immunology*, 9, 218.
<https://doi.org/10.3389/fimmu.2018.00218>

TERCAS, A.G. et al. (2017). Phytochemical characterization of *Terminalia catappa* Lin. extracts and their anti-fungal activities against *Candida spp.* *Frontiers in Microbiology*, 10. <https://doi.org/10.3389/fmicb.2017.00595>

VEHEKENI, N. et al. (2020). Use of herbal remedies in the management of sleeping sickness in four northern provinces of Angola. *Journal of Ethnopharmacology*, 256, 112382–112382.
<https://doi.org/10.1016/j.jep.2019.112382>

WHO (2013). Control and surveillance of human African trypanosomiasis. World HETL Organ Tech Rep Ser: 1237. <http://www.ncbi.nlm.nih.gov/pubmed/24552089>.