HUMAN ELIXIR 700

-Third-Party Published Research on Muira Puama

HUMANBIO

Third-Party Published Research on Muira Puama

Properties/Actions Documented by Research

- ○ **Adaptogen**
- ○ **Analgesic (Pain-reliever)**
- ○ **Anti-fatigue, Anti-oxidant**
- ○ **Antiulcerous**
- ○ **Aphrodisiac**
- ○ **Central Nervous System Tonic (Tones, Balances, Strengthens)**
- ○ **Hypotensive (Lowers Blood Pressure), Memory-Enhancer, Nervine (Balances/Calms Nerves)**
- ○ **Aeurasthenic (Reduces Nerve pain)**
- ○ **Neuroprotective (Protects Brain Cells)**

○ Actions on Erectile Function and Libido:

1) *Mendes, F., et al. "Tonic, fortifier and aphrodisiac: adaptogens in the Brazilian folk medicine," Rev. Bras. Farmacogn. 2011 Jun; 21(4): 754-763.*
https://www.scielo.br/j/rbfar/a/XH4QMTczHgcsSyxyRgsj9Mr/

2) *Melnyk, P., et al. "Aphrodisiacs from plant and animal sources—A review of current scientific literature." Food Res. Int. 2011 May; 44(4): 840-850.* https://www.sciencedirect.com/science/article/abs/pii/S0963996911001451

3) *Rowland, D., et al. "A review of plant-derived and herbal approaches to the treatment of sexual dysfunctions." J. Sex. Marital Ther. 2003 May-Jun; 29(3): 185-205.* https://pubmed.ncbi.nlm.nih.gov/12851124/

4) *Waynberg, J., et al. "Effects of Herbal vX on libido and sexual activity in premenopausal and postmenopausal women." Adv. Ther. 2000 Sep-Oct; 17(5): 255-62.* https://pubmed.ncbi.nlm.nih.gov/11186145/

5) *Waynberg, J. "Male sexual asthenia—interest in a traditional plant-derived medication." Ethnopharmacology; 1995.* https://patents.google.com/patent/WO2012131638A1/en

6) *Waynberg, J. "Contributions to the clinical validation of the traditional use of Ptychopetalum guyanna." Presented at the First International Congress on Ethnopharmacology, Strasbourg, France, June 5-9, 1990.*

7) *Gaebler, H. "Revival of the drug Muira puama." Deut. Apoth. 1979; 22(3): 94-6.* https://rsdjournal.org/index.php/rsd/article/view/24592

○ Memory Enhancement, Anti-Alzheimer's & Neuroprotective Actions:

8) *Tang, W., et al. "Two new stachane diterpenoids from the bark of Ptychopetalum olacoides." Chem. Nat. Compounds. 2016 Sep; 52(5): 841-844.* https://link.springer.com/article/10.1007/s10600-016-1792-3

9) *Howes M., et al. "Ethnobotanical treatment strategies against Alzheimer's disease." Curr. Alzheimer Res. 2012 Jan; 9(1): 67-85.* https://pubmed.ncbi.nlm.nih.gov/22329652/

10) *Figueiro, M., et al. "Inhibition of Ptychopetalum olacoides on acetylcholinesterase isoforms in brain of mice." Chin. Herb. Med. 2012 Aug; 4(3): 189-194.* https://www.sciencedirect.com/science/article/abs/pii/S167463841260015X

11) *Figueiro, M., et al. "The Amazonian herbal Marapuama attenuates cognitive impairment and neuroglial degeneration in a mouse Alzheimer model." Phytomedicine. 2011 Feb; 18(4): 327-33.*
https://pubmed.ncbi.nlm.nih.gov/20739160/

12) *Figueiro, M., et al. "Acetylcholinesterase inhibition in cognition-relevant brain areas of mice treated with a nootropic Amazonian herbal (Marapuama)." Phytomedicine. 2010 Oct; 17(12): 956-62.*
https://pubmed.ncbi.nlm.nih.gov/20833520/

13) *Tang, W., et al. "Novel NGF-potentiating diterpenoids from a Brazilian medicinal plant, Ptychopetalum olacoides." Bioorg. Med. Chem. Lett. 2009 Feb; 19(3): 882-6.*
https://pubmed.ncbi.nlm.nih.gov/19095451/

14) *da Silva, A., et al. "MK801- and scopolamine-induced amnesias are reversed by an Amazonian herbal locally used as a "brain tonic"." Psychopharmacology. 2009 Jan; 202(1-3): 165-72.*
https://link.springer.com/article/10.1007/s00213-008-1272-y

15) *Tang, W., et al. "Clerodane diterpenoids with NGF-potentiating activity from Ptychopetalum olacoides." J. Nat. Prod. 2008 Oct; 71(10): 1760-3.*
https://pubmed.ncbi.nlm.nih.gov/18821798/

16) *da Silva, A., et al. "Serotonin receptors contribute to the promnesic effects of P. olacoides (Marapuama)." Physiol. Behav. 2008 Sep; 95(1-2): 88-92.*
https://pubmed.ncbi.nlm.nih.gov/18561960/

17) Siqueira, I., et al. "Antioxidant activities of Ptychopetalum olacoides ("muirapuama") in mice brain." Phytomedicine. 2007 Nov; 14(11): 763-9.
https://pubmed.ncbi.nlm.nih.gov/17433649/

18) da Silva, A., et al. "Promnesic effects of Ptychopetalum olacoides in aversive and non-aversive learning paradigms." J. Ethnopharmacol. 2007 Feb; 109(3): 449-457.
https://pubmed.ncbi.nlm.nih.gov/17023132/

19) da Silva, A., et al. "Memory retrieval improvement by Ptychopetalum olacoides in young and aging mice." J. Ethnopharmacol. 2004 Dec; 95(2-3): 199-203.
https://pubmed.ncbi.nlm.nih.gov/15507336/

20) Siqueira, I., et al. "Neuroprotective effects of Ptychopetalum olacoides Bentham (Olacaceae) on oxygen and glucose deprivation induced damage in rat hippocampal slices." Life Sci. 2004 Aug; 75(15): 1897-906.
https://pubmed.ncbi.nlm.nih.gov/15302233/

21) Ng, T., et al. "Plants beneficial to the aging brain." Neuroembryol Aging 2004; 5(3): 136–141.
https://www.researchgate.net/publication/247702206_Plants_Beneficial_to_the_Aging_Brain

22) Siqueira, I., et al. "Ptychopetalum olacoides, a traditional Amazonian "nerve tonic," possesses anticholinesterase activity." Pharmacol. Biochem. Behav. 2003 Jun; 75(3): 645-50.
https://pubmed.ncbi.nlm.nih.gov/12895682/

23) Siqueira, I., et al. "Psychopharamcological properties of Ptychopetalum olachoides Bentham (Olacaceae)." Pharmaceutical Biol. 1998; 36(5): 327-34.

https://www.researchgate.net/publication/250187984_Psychopharmacological_properties_of_Ptychopetalum_olacoides_BENTHAM_Olacacea

24) Forgacs, P., et al. "Phytochemical and biological activity studies on 18 plants from French Guyana." Plant Med. Phytother. 1983; 17(1): 22-32. https://www.researchgate.net/publication/316660290_Phytochemistry_and_biologic_activities_of_18_plants_from_French_Guyana

25) Da Silva, R. "Medicinal plants of Brazil. Botanical and pharmacognostic studies. Muira puama." Rev. Bras. Med. Pharm. 1925; 1(1): 37-41.

https://www.richardsfamilyhealth.com/archives/erectile_dysfunction.html

○ Anti-Anxiety, Anti-Depressant & Nervine Actions:

26) de la Peña J., et al. "The involvement of magnoflorine in the sedative and anxiolytic effects of Sinomeni Caulis et Rhizoma in mice." J. Nat. Med. 2013 Oct; 67(4): 814-21. https://pubmed.ncbi.nlm.nih.gov/23456265/

27) Piato, A., et al. "Anti-stress effects of the "tonic" Ptychopetalum olacoides (Marapuama) in mice." Phytomedicine. 2010 Mar; 17(3-4): 248-53. https://pubmed.ncbi.nlm.nih.gov/19682881/

28) Piato, A., et al. "Antidepressant profile of Ptychopetalum olacoides Bentham (Marapuama) in mice." Phytother. Res. 2009 Apr; 23(4): 519-24. https://pubmed.ncbi.nlm.nih.gov/19067380/

29) Piato, A., et al. "Effects of Marapuama in the chronic mild stress model: further indication of antidepressant properties." J. Ethnopharmacol. 2008 Jul; 118(2): 300-4. https://www.researchgate.net/publication/5336884_Effects_of_Marapuama_in_the_chronic_mild_stress_model_Further_indication_of_antidepressant_properties

30) da Silva, A., et al. "Anxiogenic properties of Ptychopetalum olacoides Benth. (Marapuama)." Phytother. Res. 2002; 16(3): 223-6.
https://www.researchgate.net/publication/11223041_Anxiogenic_properties_of_Ptychopetalum_olacoides_Benth_Marapuama

31) Siqueira, I., et al. "Psychopharamcological properties of Ptychopetalum olachoides Bentham (Olacaceae)." Pharmaceutical Biol. 1998; 36(5): 327-34.
https://www.quimica.es/enciclopedia/Ptychopetalum.html

○ Hypotensive Actions:

32) Raymond-Hamet, A. "Physiological action of the extract of muira puama." Comp. Rend. Soc. Biol. 1932; 109: 1064-7

○ Anti-fatigue, Tonic, & Adaptogenic Actions:

33) Mendes, F., et al. "Brazilian plants as possible adaptogens: An ethnopharmacological survey of books edited in Brazil." J. Ethnopharmacol. 2007 Feb; 109(3): 493-500.
https://repositorio.unifesp.br/items/669295de-75bb-41df-a7a1-fab8b26eacd0

34) Bucci, L., et al. "Selected herbals and human exercise performance." Am. J. Clin. Nutr. 2000 Aug; 72(2 Suppl): 624S-36S.
https://www.sciencedirect.com/science/article/pii/S000291652306745X

35) Paiva, L., et al. "Effects of Ptychocepalum olacoides extract on mouse behaviour in forced swimming and open field tests." Phytother. Res. 1998; 12(4): 294-96.
https://onlinelibrary.wiley.com/doi/abs/10.1002/%28SICI%291099-1573%28199806%2912%3A4%3C294%3A%3AAID-PTR230%3E3.0.CO%3B2-3

36) Waynberg, J. "Male sexual asthenia—interest in a traditional plant-derived medication." Ethnopharmacology; 1995.
https://patents.google.com/patent/WO2012131638A1/en

37) Hanawa, M., et al. "Composition containing an extract from muira puama root and plant worm extract." Taisho Pharmacuetical Co., Ltd., Tokyo, United States Patent No. 6024984, 2000.

38) Siqueira, I., et al. "Psychopharamcological properties of Ptychopetalum olachoides Bentham (Olacaceae)." Pharmaceutical Biol. 1998; 36(5): 327-34.
https://www.researchgate.net/publication/250187984_Psychopharmacological_properties_of_Ptychopetalum_olacoides_BENTHAM_Olacacea

○ Anti-cholesterol Actions:

39) Jayasuriya, H., et al. "Diterpenoid, steroid, and triterpenoid agonists of liver X receptors from diversified terrestrial plants and marine sources." J. Nat. Prod. 2005; 68(8): 1247-52.
https://pubmed.ncbi.nlm.nih.gov/16124770/

40) Cherksey, B. D. "Method of preparing Muira puama extract and its use for decreasing body fat percentage and increasing lean muscle mass." United States Patent No. 5516516, 1996.
https://patents.google.com/patent/US5516516A/en

○ Antimicrobial Actions:

41) Oliveira, A., et al. "Antimicrobial activity of Amazonian medicinal plants." Springerplus. 2013 Aug; 2: 371.
https://pmc.ncbi.nlm.nih.gov/articles/PMC3738913/

42) Correia, A., et al. "Amazonian plant crude extract screening for activity against multidrug-resistant bacteria." Eur. Rev. Med. Pharmacol. Sci. 2008 Nov-Dec; 12(6): 369-80.
https://pubmed.ncbi.nlm.nih.gov/19146199/

○ Antioxidant & Anti-inflammatory Actions:

43) de Vargas, F., et al. "Antioxidant activity and peroxidase inhibition of Amazonian plants extracts traditionally used as anti-inflammatory." BMC Complement. Altern. Med. 2016 Feb; 16: 83.
https://pmc.ncbi.nlm.nih.gov/articles/PMC4769535/

44) Siqueira, I., et al. "Antioxidant activities of Ptychopetalum olacoides ("muirapuama") in mice brain." Phytomedicine. 2007 Nov; 14(11): 763-9.
https://pubmed.ncbi.nlm.nih.gov/17433649/

45) Siqueira, I., et al. "Antioxidant action of an ethanol extract of Ptychopetalum olacoides." Pharm. Bio. 2002; 40(5): 374-379.
https://www.researchgate.net/publication/10631750_Ptychopetalum_olacoides_a_traditional_Amazonian_nerve_tonic_possesses_anticholinesterase_activity

○ Chemicals Identified:

46) Tian, X., et al. "Qualitative and quantitative analysis of chemical constituents of Ptychopetalum olacoides Benth." Nat. Prod. Res. 2018 Feb; 32(3): 354-357.
https://pubmed.ncbi.nlm.nih.gov/28750557/

47) Tang, W., et al. "Two new stachane diterpenoids from the bark of Ptychopetalum olacoides." Chem. Nat. Compounds. 2016 Sep; 52(5): 841-844.
https://link.springer.com/article/10.1007/s10600-016-1792-3

48) *Tang, W., et al. "Eight new clerodane diterpenoids from the bark of Ptychopetalum olacoides." Nat. Prod. Commun. 2011 Mar; 6(3): 327-32.* *https://pubmed.ncbi.nlm.nih.gov/21485268/*

49) *Colombo, R., et al. "Validated high-performance liquid chromatographic method for the standardisation of Ptychopetalum olacoides Benth., Olacaceae, commercial extracts." Braz. J. Pharmacog. 2010 Nov; 20(5): 781-788.* *https://www.researchgate.net/publication/262433789_Validated_high-performance_liquid_chromatographic_method_for_the_standardisation_of_Ptychopetalum_olacoides_Benth_Olacaceae_commercial_extracts*

50) *Tang, W., et al. "Novel NGF-potentiating diterpenoids from a Brazilian medicinal plant, Ptychopetalum olacoides." Bioorg. Med. Chem. Lett. 2009 Feb; 19(3): 882-6.* *https://pubmed.ncbi.nlm.nih.gov/19095451/*

51) *Tang, W., et al. "Clerodane diterpenoids with NGF-potentiating activity from Ptychopetalum olacoides." J. Nat Prod. 2008 Oct; 71(10): 1760-3.* *https://pubmed.ncbi.nlm.nih.gov/18821798/*