

Chanca Piedra (*Phyllanthus niruri*)

Immunomodulatory Actions

- Trivadila, T., et al. "Herbal immunostimulants and their phytochemicals: Exploring *Morinda citrifolia*, *Echinacea purpurea*, and *Phyllanthus niruri*." *Plants* (Basel). 2025 Mar; 14(6): 897.
- Abubakar, J., et al. "Herbal supplements suppress pro-inflammatory cytokines, boost humoral immunity, and modulate adipokines to enhance the productivity traits of rabbit bucks in hot climatic conditions." *Trop. Anim. Health Prod.* 2023 May; 55(3): 227.
- Nhu, T., et al. "Immunomodulatory potential of extracts, fractions and pure compounds from *Phyllanthus amarus* and *Psidium guajava* on striped catfish (*Pangasianodon hypophthalmus*) head kidney leukocytes." *Fish Shellfish Immunol.* 2020 Sep; 104: 289-303.
- Ngo, H., et al. "Effects of *Phyllanthus amarus* extract on nonspecific immune responses, growth, and resistance to *Vibrio alginolyticus* in white shrimp *Litopenaeus vannamei*." *Fish Shellfish Immunol.* 2020 Dec; 107(Pt A): 1-8.
- Jantan, I., et al. "An insight into the modulatory effects and mechanisms of action of *Phyllanthus* species and their bioactive metabolites on the immune system." *Front. Pharmacol.* 2019 Aug; 10: 878.
- Wu, W., et al. "Phyllanthin and hypophyllanthin from *Phyllanthus amarus* ameliorates immune-inflammatory response in ovalbumin-induced asthma: role of IgE, Nrf2, iNOs, TNF-, and IL's." *Immunopharmacol. Immunotoxicol.* 2019 Feb; 41(1): 55-67.
- Li, L., et al. "Corilagin interferes with toll-like receptor 3-mediated immune response in Herpes simplex encephalitis." *Front. Mol. Neurosci.* 2019 Apr; 12: 83.
- Nhu, T., et al. "Screening of immuno-modulatory potential of different herbal plant extracts using striped catfish (*Pangasianodon hypophthalmus*) leukocyte-based *in vitro* tests." *Fish Shellfish Immunol.* 2019 Oct; 93: 296-307.
- Nhu, T., et al. "Plant extract-based diets differently modulate immune responses and resistance to bacterial infection in striped catfish (*Pangasianodon hypophthalmus*)." *Fish Shellfish Immunol.* 2019 Sep; 92: 913-924.
- Putri, D., et al. "Immune modulation properties of herbal plant leaves: *Phyllanthus niruri* aqueous extract on immune cells of tuberculosis patient - *in vitro* study." *Nat. Prod. Res.* 2018 Feb; 32(4): 463-467.
- Tjandrawinata, R., et al. "The use of *Phyllanthus niruri* L. as an immunomodulator for the treatment of infectious diseases in clinical settings." *Trop. J. Pharm. Res.* 2017 Aug; 16(8): 1873.
- Lee, N., et al. "The pharmacological potential of *Phyllanthus niruri*." *J. Pharm. Pharmacol.* 2016; 68: 953-69.
- Muthulakshmi, M., et al. "Immunostimulatory effect of the aqueous leaf extract of *Phyllanthus niruri* on the specific and nonspecific immune responses of *Oreochromis mossambicus* Peters."

Iran J. Vet. Res. 2016 Summer; 17(3): 200-202.

Ilangkovan, M., et al. "Phyllanthin from *Phyllanthus amarus* inhibits cellular and humoral immune responses in Balb/C mice." *Phytomedicine*. 2016 Nov; 23(12): 1441-1450.

Yuandani, I., et al. "Inhibitory effects of compounds from *Phyllanthus amarus* on nitric oxide production, lymphocyte proliferation, and cytokine release from phagocytes." *Drug Des. Devel. Ther.* 2016 Jun; 10: 1935-45.

Ilangkovan, M., et al. "Inhibitory effects of the standardized extract of *Phyllanthus amarus* on cellular and humoral immune responses in Balb/C mice." *Phytother. Res.* 2016 Aug; 30(8): 1330-8.

Ilangkovan, M., et al. "Immunosuppressive effects of the standardized extract of *Phyllanthus amarus* on cellular immune responses in Wistar-Kyoto rats." *Drug Des. Devel. Ther.* 2015 Aug; 9: 4917-30.

Kumar, P., et al. "Effect of *Phyllanthus niruri* extracts on colony forming units of the granulocyte-macrophage series activity in serum of mice." *World J. Pharm. Pharmacol. Sci.* 2015; 4: 1984-92.

Eze, C., et al. "Immunomodulatory activities of methanol extract of the whole aerial part of *Phyllanthus niruri* L." *J. Pharmacogn. Phytother.* 2014; 6: 41-6.

Yuandani, I., et al. "Inhibitory effects of standardized extracts of *Phyllanthus amarus* and *Phyllanthus urinaria* and their marker compounds on phagocytic activity of human neutrophils." *Evid. Based Complement. Alternat. Med.* 2013; 2013: 603634.

Chowdhury, S., et al. "The lignan niranthin poisons *Leishmania donovani* topoisomerase IB and favours a Th1 immune response in mice." *EMBO Mol. Med.* 2012 Oct; 4(10): 1126-43.

Rahfiludin, M., et al. "*Phyllanthus niruri* extract could improve immunoglobulin-M anti phenolic glycolipid-1 level in seropositive contact of Hansen's disease patients." *J. Heath Res.* 2012 Apr; 26(2): 55-77.

Jatan, I., et al. "Inhibition of chemiluminescence and chemotactic activity of phagocytes *in vitro* by the extracts of selected medicinal plants." *J. Nat. Med.* 2011 Apr; 65(2): 400-5.

Nworu, C., et al. "The effects of *Phyllanthus niruri* aqueous extract on the activation of murine lymphocytes and bone marrow-derived macrophages." *Immunol. Invest.* 2010 Jan; 39(3): 245-67.

Mellinger, C., et al. "Chemical and immunological modifications of an arabinogalactan present in tea preparations of *Phyllanthus niruri* after treatment with gastric fluid." *Int. J. Biol. Macromol.* 2008 Aug; 43(2): 115-20.

Sarisetyaningtyas, P., et al. "Randomized controlled trial of *Phyllanthus niruri* Linn extract." *Paediatr. Indones.* 2006; 46: 77-81.

Pramayanti, I., et al. "Comparison of success rate of vaginal candidiasis treatment between ketokonazole and combination of ketokonazole-*Phyllanthus niruri* extract." *Dexa Media* 2005; 18: 97-102.

Radityawan, D. "The immunomodulatory effect of *Phyllanthus niruri* L on serum IFN- γ level in

pulmonary tuberculosis patients." *Dexa Media* 2005; 18: 94-96.

Halim, H., and Saleh, K. "The effectiveness of *Phyllanthus niruri* extract in the management of pulmonary tuberculosis." *Dexa Media* 2005; 18: 103-107.

Amin, Z. "The effect of *Phyllanthus* extract as an additional treatment in tuberculosis patients with minimal and moderately advanced radiological lesion." Dissertation 2005. University of Indonesia, Jakarta.

Raveinal, R. "The effect of natural immunomodulator (Phyllanti herb extract) administration on cellular immune response of patients with pulmonary tuberculosis." 2003 Thesis. University of Andalas, Padang, Indonesia.

Ma'at, S. "Antimycotic and immunomodulator in mycosis: *Phyllanthus niruri* extract as a natural immunomodulator." Paper presented at the periodic scientific meeting of the Association of Human and Animal Mycological Medicine, Solo. Central Java, September 2001.

Ma'at, S. "*Phyllanthus niruri* L. as an immunostimulator in mice." 1996 Dissertation. University of Airlangga, Surabaya, Indonesia.

Return to the Rain-Tree [Tropical Plant Database File on Chanca Piedra](#)

© Copyrighted 2025 by [Leslie Taylor](#). All rights reserved.