

Artemisia Animal Health Summary



Poultry farming

The contribution of *Artemisia annua* :

- boosts poultry immunity
- reduces mortality of chicks, hens and adult chickens from 16% to 5
- reduces the level of common pathogenic bacteria such as Enterobacteriaceae, Escherichia coli and staphylococcus in broilers
- acts as an antiparasitic and prevents coccidiosis and regulates (a major source of mortality in farmed chickens)
- reduces the risk of leucocytozoonosis and the consequences (mortality, weight loss...) linked to this pathology
- increases weight gain
- improves the quality of the animal flesh
- improves resistance to heat stress
- improves the intestinal microflora (proliferation of lactic acid bacteria in the intestine and cecum)
- promotes growth and antioxidant function of broilers.
- could become a substitute for antibiotics in broilers.

The optimal dose of aqueous extract of *Artemisia annua* L. in the diet of broilers would be 1000 to 1500 mg/kg.

Effects

References

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|---|---|
| - boosts poultry immunity | Shiwei Guo, & al., <i>Artemisia annua</i> L. Aqueous Extract Promotes Intestine Immunity and Antioxidant Function in Broilers, <i>Front Vet Sci</i> , . 2022 Jul 8;9:934021. |
| - reduces mortality of chicks, hens and adult chickens from 16% to 5 | Thierno Ba, Effets de l'incorporation des feuilles d'Armoise annuelle séchées (<i>Artemisia annua</i> L.) dans des rations pour poulets, Mémoire de fin d'étude pour l'obtention du Diplôme d'Ingénieur Agronome Option : Productions Animales, 2015, École Nationale Supérieure d'Agriculture (ENSA) Département Productions Animales |
| - reduces the level of common pathogenic bacteria such as Enterobacteriaceae, Escherichia coli and staphylococcus in broilers | .Randa M. Alarousy, Mostafa M. Eraqi, Hany H. Abd Elhamid and Johra Khan, « Antimicrobial Activity of the Essential Oil Extracted from <i>Artemisia Annua</i> », <i>World Journal of Pharmaceutical Research</i> Volume 7, Issue 18, 1402-1417. |
| - acts as an antiparasitic and prevents coccidiosis and regulates (a | Naidoo, V., McGaw, L. J., Bisschop, S. P. R., Duncan, N., & Eloff, J. N. (2008). The value of plant extracts with antioxidant activity in |

major source of mortality in farmed chickens)	attenuating coccidiosis in broiler chickens. <i>Veterinary Parasitology</i> , 153(3-4), 214–219.
- reduces the risk of leucocytozoonosis and the consequences (mortality, weight loss...) linked to this pathology	Drgan L, Györke A, Ferreira JF, Pop IA, Dunca I, Drogan M, Mircean V, Dan I, Cozma V. « Effects of <i>Artemisia annua</i> and <i>Foeniculum vulgare</i> on chickens highly infected with <i>Eimeria tenella</i> (phylum Apicomplexa) », <i>Acta Vet Scand</i> (2014)
- increases weight gain	Allen PC, Lydon J, Danforth HD, Effects of components of <i>Artemisia annua</i> on coccidia infections in chickens, <i>Poultry Science</i> Volume 76, Issue 8, 1 August 1997, Pages 1156-1163
- improves the quality of the animal flesh	Yu-Huan Chiang, Yen-Cheng Lin, Sheng-Yang Wang, Yen-Pai Lee, Chih-Feng Chen, Effects of <i>Artemisia annua</i> on experimentally induced leucocytozoonosis in chickens, <i>Poultry Science</i> Volume 101, Issue 4, April 2022
- improves resistance to heat stress	Song, Z. H., et al., Effects of dietary supplementation with enzymatically treated <i>Artemisia annua</i> on growth performance, intestinal morphology, digestive enzyme activities, immunity, and antioxidant capacity of heat-stressed broilers, <i>Poultry science</i> 97.2 (2018)
- improves the intestinal microflora (proliferation of lactic acid bacteria in the intestine and cecum)	Panda, Arun K., and Gita Cherian. « Tissue tocopherol status, meat lipid stability, and serum lipids in broiler chickens fed <i>Artemisia annua</i> », <i>European Journal of Lipid Science and Technology</i> 119.2 (2017)
- promotes growth and antioxidant function of broilers.	Saracila, M., et al., « <i>Artemisia annua</i> as phytogenic feed additive in the diet of broilers (14-35 days) reared under heat stress (32 °C) », (<i>Artemisia annua</i> comme additif alimentaire phytogénique dans l'alimentation des poulets de chair (14-35 jours) élevés sous stress thermique (32 °C), <i>Brazilian Journal of Poultry Science</i> 20.4 (2018)
- could become a substitute for antibiotics in broilers	Panaite, T. D., et al., « Influence of <i>Artemisia Annua</i> on Broiler Performance and Intestinal Microflora », <i>Brazilian Journal of Poultry Science</i> 21.4 (2019)
	Guo, Shiwei, et al. « <i>Artemisia annua</i> L. aqueous extract as an alternative to antibiotics improving growth performance and antioxidant function in broilers », <i>Italian Journal of Animal Science</i> 19.1 (2020)
	Guo, Shiwei, et al. « <i>Artemisia annua</i> L. aqueous extract as an alternative to antibiotics improving growth performance and antioxidant function in broilers », <i>Italian Journal of Animal Science</i> 19.1 (2020)

Pig farming

- reduces oxidative stress
- improves lactation performance
- increases piglet weight at weaning

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References

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Rabbit farming

- Reduces the risk of coccidiosis and improves weight gain
- Improves growth

Effects

- reduces the risk of coccidiosis and improves weight gain
- improves growth

References

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Sheep farming

Effects

- reduces intestinal parasitosis

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Cattle farming

- decreases the incidence of *Staphylococcus aureus*, *Streptococcus agalactia* was 20%; *Shigella flexneri*, *Escherichia coli*, *Listeria monocytogenes* and *Candida albicans* in milk
- supports the metabolism of lipids in the mammary gland
- acts as an anti-inflammatory protects the udder from mastitis

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Fish farming

- promotes the intestinal microbiota of fish.
- improves the feed efficiency of the given food and the performance of the Nile tilapia.

Références

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