

EFFECT OF *SYZYGIUM AROMATICUM L* OIL IN THE TREATMENT OF EQUINE THRUSH

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Introduction. In the 266 b.C. – 220 b.C. Chinese Han dynasty used the *Syzygium aromaticum* flower buds to take out the smelly breath from people. This plant has a high concentration of *eugenol* in its oil. *Eugenol* has antiseptic, bactericide, antimycotic, antiparasite proprieties. *Eugenol* has inhibitory actions for *Staphylococcus aureus* Penicillin G resistant, *E. coli* and *Candida albicans*, and also some other mycotic agents. The objective was to determine the *Syzygium aromaticum L* oil effect in the treatment of equine thrush.

Materials and Methods. Selection of horses with thrush (n=30) was based upon the refractory responses to previous sanitary and medical treatments for at least 60 days. Horses were randomly assigned into two groups; group 1 (n=20) treated with *Syzygium aromaticum L* oil gel in the frog every 12hs for 30 days; group 2 (n=5) where the control keeping, like all three groups, the sanitary management; group 3 (n=5) was treated with a placebo gel. Controls were done every 7 days for six weeks. Improvement parameters where: a) no putrid secretion; b) frog hardening and disappearance of pain at pressure palpation; c) Scarring sings shown as decrease in the cracks of the frog. The statistic method applied was proportions using a normal distribution.

Results. The results obtained are: in group 1 at 1st control there was a percentage of animals with no putrid secretions significantly superior to 60%, and increasing at 3rd control to a 100%, maintaining 100% till the end of the study (1st control: p=0.80, n=20; p=0.0340 < 0.05). In group 1 at 2nd control there was a percentage of animals with frog hardening and no signs of pain at pressure palpation significantly superior to 70%, and increasing at 4th control to a 100%, maintaining 100% till the end (2nd control: p=0.90, n=20; p=0.0256 < 0.05). In group 1 at 4th control there was a percentage of animals with scar tissue signs significantly superior to 40%, maintaining it till the end (5th control: p=0.60, n=20; p=0.0336 < 0.05). Just 20% of the animals from group 2 and 3 developed a favorable response to variables at 5th control.

Discussion. Taking this study as a pilot experience, treatment with *Syzygium aromaticum L* oil gel would be effective for thrush in horses that had been reluctant to other therapies.

Conclusion. Horse stabled and improper foot care predispose thrush, and conventional treatments are long and many times ineffective. This experience with *Syzygium aromaticum L* would justify its use in the treatment of this condition.