

Mei et al, Plant-based therapies for dermatophyte infections, Appendix 2: In vivo animal studies of anti-dermatophytic plants. ©, *Tasman Medical Journal. TMJ 2022: 3; 21-37*

Ref	Scientific name	Study animals	Intervention	Control	Main results
99	<i>Curcuma longa</i> L.	Guinea pigs with induced <i>T. rubrum</i> infection	Turmeric oil (1: 80 dilution)	Canesten, Nil treatment	Turmeric oil reduced erythema and scale by 2-3 days, and lesions disappeared by day 7. Canesten decreased the erythema on the sixth day. Control group had increasing scale over 3 weeks.
50	<i>Polyscias fulva</i> (Hiern) Harms	12 guinea pigs with induced <i>T. mentagrophytes</i> infection	Plant extract-oil at concentrations (1.25, 2.5 and 5%)	5% Griseofulvin-oil, negative control oil vehicle	At 14 days, 5% formulated extract-oil was comparable to griseofulvin-oil (5%) in microbial eradication.
119	<i>Astragalus verus</i> Olivier	25 male albino guinea pigs with induced <i>T. verrucosum</i> infection	10%, 20% and 40% concentrations of aqueous extract of <i>A. verus</i>	Negative control, Vehicle group, 1% terbinafine	At 7 days, significant reduction in lesion scores was seen in 20%, 50% aqueous extract and terbinafine groups compared to negative control group. Terbinafine was significantly better than 10% and 20% aqueous extract groups in lesion scores.
61	<i>Urtica dioica</i> L.	Guinea pigs with induced <i>M. canis</i> infection	Stinging nettle 10%, 20% and 30% hydroalcoholic extracts	No treatment, 1% terbinafine, 10% DMSO (Vehicle)	At 30 days, only 30% stinging nettle and terbinafine had significant net clinical efficacy compared to negative control. No <i>in-vitro</i> activity recorded.
144	<i>Thymus vulgaris</i> L.	25 Wistar rats with induced <i>Trichophyton</i> infection	1% essential oil of <i>T. vulgaris</i>	Bifonazole cream, No treatment	Rats were cured after 24- 37 days of treatment with essential oil and 14 ¹ 5 days with bifonazole. Untreated rats were symptomatic throughout 37 days of observation.
123	<i>Terminalia chebula</i> Retz.	30 mice with induced <i>T. mentagrophytes</i> infection	Isolated apigenin at 2.5mg g ⁻¹ and 5mg/g	Terbinafine 5mg g ⁻¹ , No treatment	After 12 days, complete cure was recorded for 5mg g ⁻¹ of apigenin and terbinafine with no significant difference. Apigenin 2.5 mg g ⁻¹ achieved cure on the 16 th day of treatment.
112	<i>Lawsonia inermis</i> L.	15 naturally infected goats with ringworm	Henna paste, Aqueous extract Ethanol extract	Clotrimazole cream Negative control	Disappearance of the lesion at 30 days for henna paste, aqueous extract and ethanol extract, 27 days for clotrimazole, and 70 days for control group. Significant differences were between treated groups and negative control group only.
104	<i>Cymbopogon martini</i> (Roxb.) W.Watson <i>Chenopodium ambrosioides</i> L.	Guinea pigs with induced dermatophytosis with <i>T. rubrum</i> and <i>M. gypseum</i>	Essential oils of <i>C. martini</i> , <i>C. ambrosioides</i> and a combination of essential oils	Negative control (petroleum jelly)	<i>C. martini</i> achieved complete cure of infection (by culture) at day 17 and 21 for <i>T. rubrum</i> and <i>M. gypseum</i> , respectively. <i>C. ambrosioides</i> and oil combination treated the disease at day 21. The control had 100% culture recovery throughout the observation period. No statistical analysis.
124	<i>Chenopodium ambrosioides</i> L.	Guinea pigs with induced dermatophytosis.	Essential oil ointment	None	<i>Chenopodium</i> ointment cured the infection on day 15 for <i>T. mentagrophytes</i> and day 13 for <i>M. andouinii</i> infection with zero percent culture recovery.
81	<i>Thymus serpyllum</i> L., <i>Origanum vulgare</i> L. and <i>Rosmarinus officinalis</i> L.	21 sheep infected with <i>T. mentagrophytes</i> in an outbreak	13 sheep with mixture of 5% <i>O. vulgare</i> , 5% <i>R. officinalis</i> and 2% <i>T. serpyllum</i> in sweet almond oil 6 sheep with 5% iodine	2 sheep with no treatment	All treated animals with the plant extract and iodine were clinically cured with negative cultures after 6 weeks. Untreated animals remained clinically affected and culture positive.
78	<i>Ocimum gratissimum</i> L., <i>Trachyspermum ammi</i> (L.) Sprague	16 guinea pigs with induced <i>M. gypseum</i> and <i>E. floccosum</i> infection	Essential oil ointment of 1000ppm <i>O. gratissimum</i> or <i>T. ammi</i> and polyethylene glycol	No treatment control	<i>Ocimum</i> essential oil treatment cured infections by day 9 ¹ . With <i>T. ammi</i> oil, dermatophytosis was cured by day 11-13 Control had 100% culture recovery at day 15.
22	<i>Nigella sativa</i> L.	24 cattle with <i>T. verrucosum</i> dermatophytosis	Oil of <i>N. sativa</i> Combined treatment of <i>N. sativa</i> and enilconazole	10% enilconazole	At 42 days, clinical healing occurred completely in six animals treated with enilconazole, five animals treated with <i>N. sativa</i> and all animals treated with a combination of enilconazole and <i>N. sativa</i> .