

# Parasitic Dermatitis

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# Causative Organism

1. Ticks
2. Fleas
3. Lice
4. MITES
  - a) Demodicosis – Juvenile & Adult
  - b) Scabies/Mange

# Symptoms – Ticks, Flea, Lice

1. Usually No lesions
2. Inflamed nodule or papules

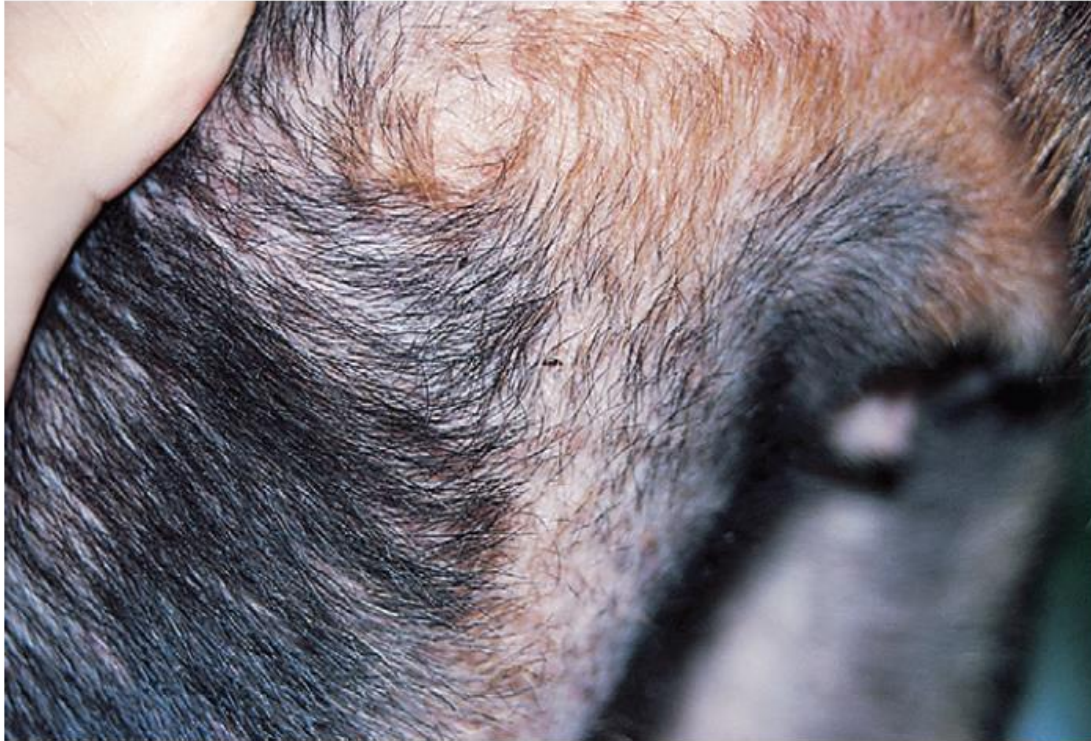


**FIGURE 5-1 Ixodid Ticks.** Multiple ticks attached to the inner ear pinnae. (Courtesy D. Angarano.)



**FIGURE 5-2 Ixodid Ticks.** This erythematous lesion developed at the site of tick attachment. (Courtesy D. Gram.)



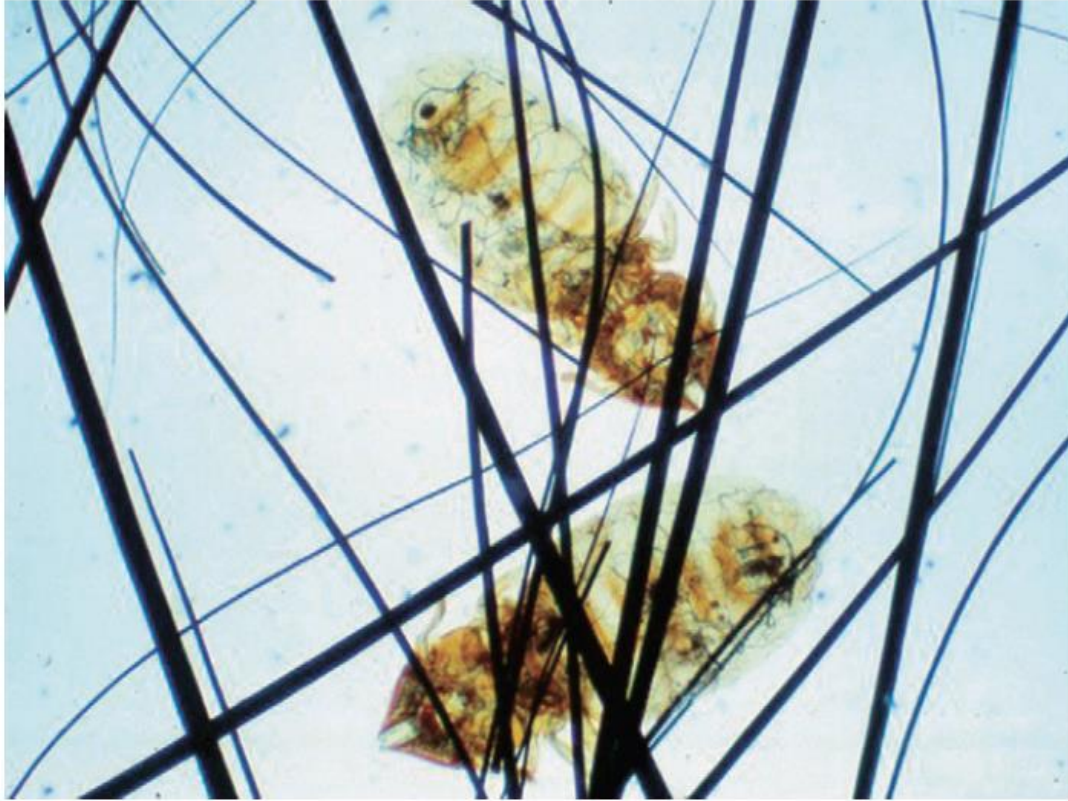


**FIGURE 5-69 Fleas.** Fleas on the caudal aspect of the rear leg of a dog.

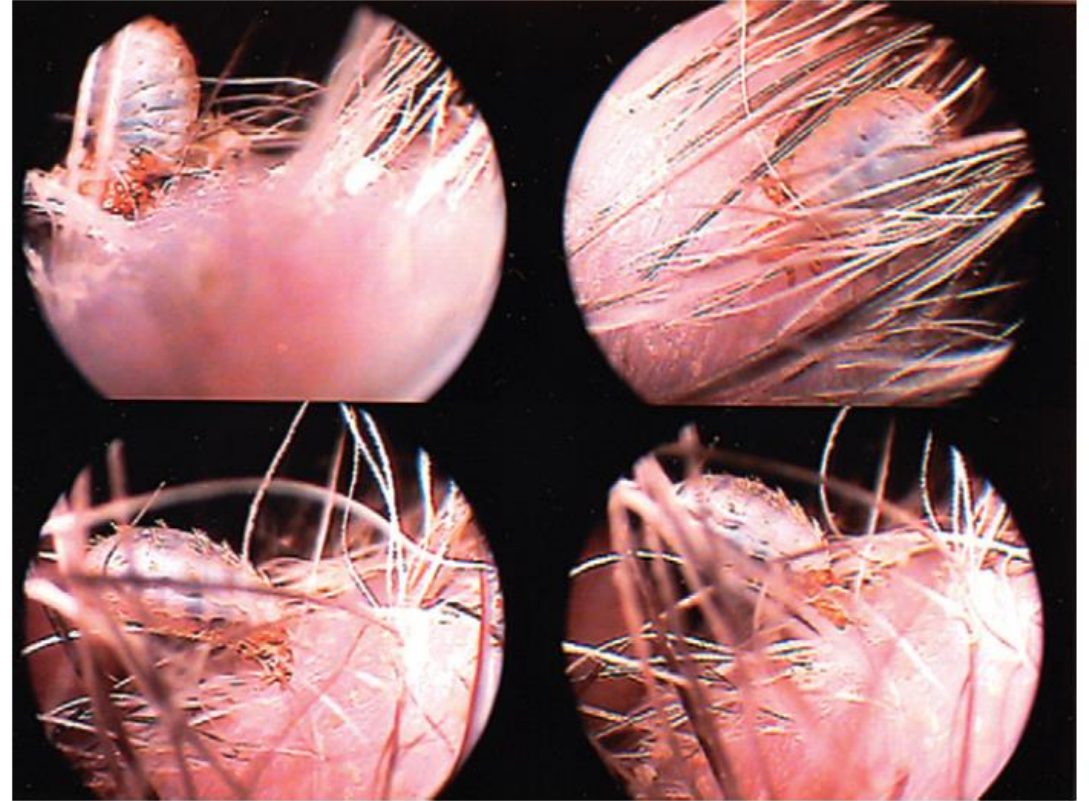


**FIGURE 5-70 Fleas.** Numerous fleas on the trunk of a cat.





**FIGURE 5-82 Pediculosis.** Biting lice, as seen with a 4 $\times$  objective. (Courtesy D. Angarano.)



**FIGURE 5-83 Pediculosis.** Lice, as seen with a video otoscope.

# Diagnosis – Tick, Flea, Lice

1. Naked eye visualization
2. Under a Microscope
3. Flea Dirt – Flea fecal matter
4. White Nits - Lice

# Treatment – Ticks, Flea, Lice

1. Manual Removal
2. Topical Preparations –
  - a) Amitraz (Solution)
  - b) Fipronil (Spot On & Spray)
  - c) Permethrin (Shampoo)
  - d) Methoprene (Spot On)
  - e) Piriproxyfen (Spot On)
  - f) Selamectin (Spot On)
  - g) Metaflumizone (Spot On)
  - h) Carbaryl (Powder)
  - i) Propoxur (Powder)



# Treatment – Ticks, Flea, Lice

3. Isoxazolines (Oral Tablets) – 4 weeks interval – Cl channel blocker
  - a) Afoxolaner – NEXGUARD
  - b) Fluralaner – BRAVECTO
  - c) Lotilaner – CREDELIO
  - d) Sarolaner - SIMPARICA

# Symptoms - Demodicosis

1. Patchy alopecia –  
Regional/Multifocal/Diffuse
2. Erythema, Silver greyish scaling  
(**Comedones**), papules & pruritus
3. Long standing cases – **Lichenification**,  
**Hyperpigmentation**, Pustule, Erosion,  
Ulceration, Crust formation
4. Lymphadenomegaly
5. Systemic Signs – secondary infection

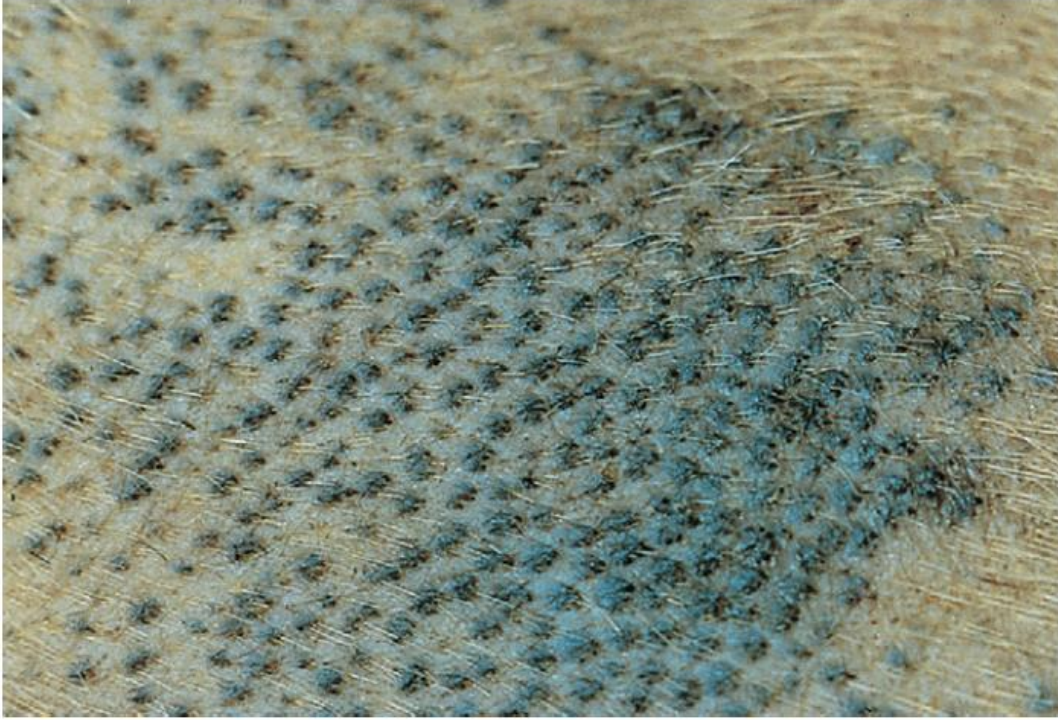


**FIGURE 5-3 Canine Localized Demodicosis.** Multiple alopecic papular lesions on the face of an adult Shetland Sheep dog. (Courtesy D. Angarano.)



**FIGURE 5-4 Canine Localized Demodicosis.** Focal area of alopecia and hyperpigmentation typical of folliculitis.





**FIGURE 5-5 Canine Localized Demodicosis.** Numerous comedones on the abdomen of a dog with hyperadrenocorticism. Comedones are often caused by demodicosis or Cushing's disease.



**FIGURE 5-6 Canine Localized Demodicosis.** Microscopic image of *Demodex* mites, as seen with a 10× objective.





**FIGURE 5-13 Canine Generalized Demodicosis.** Close-up of the dog in Figure 5-12. Multifocal areas of alopecia with mild hyperpigmentation are apparent.



**FIGURE 5-14 Canine Generalized Demodicosis.** Diffuse alopecic, erythematous, crusting, papular lesions affecting the entire head and neck.





**FIGURE 5-15** Canine Generalized Demodicosis. Alopecic, erythematous, papular dermatitis on the axilla and ventral trunk of an adult dog with iatrogenic hyperadrenocorticism.



**FIGURE 5-16** Canine Generalized Demodicosis. Multiple patches of comedones on the abdomen of a dog.



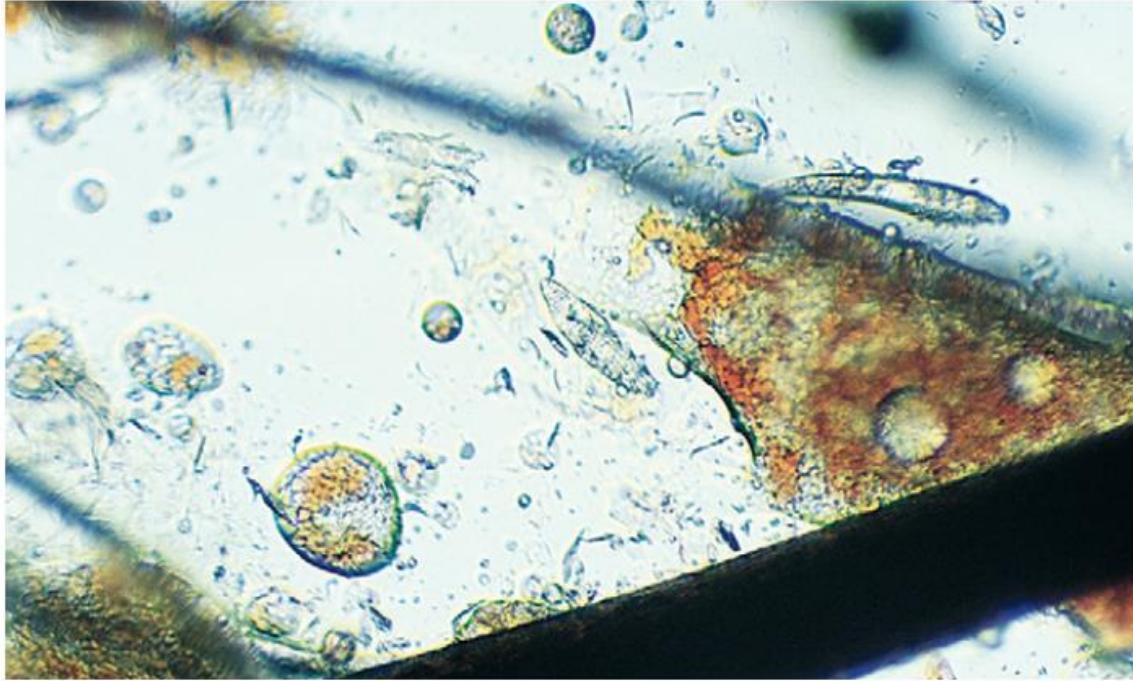


**FIGURE 5-21** Canine Generalized Demodicosis. Severe alopecia, erythema, and hyperpigmentation with a papular rash on the feet of an adult dog with iatrogenic hyperadrenocorticism.

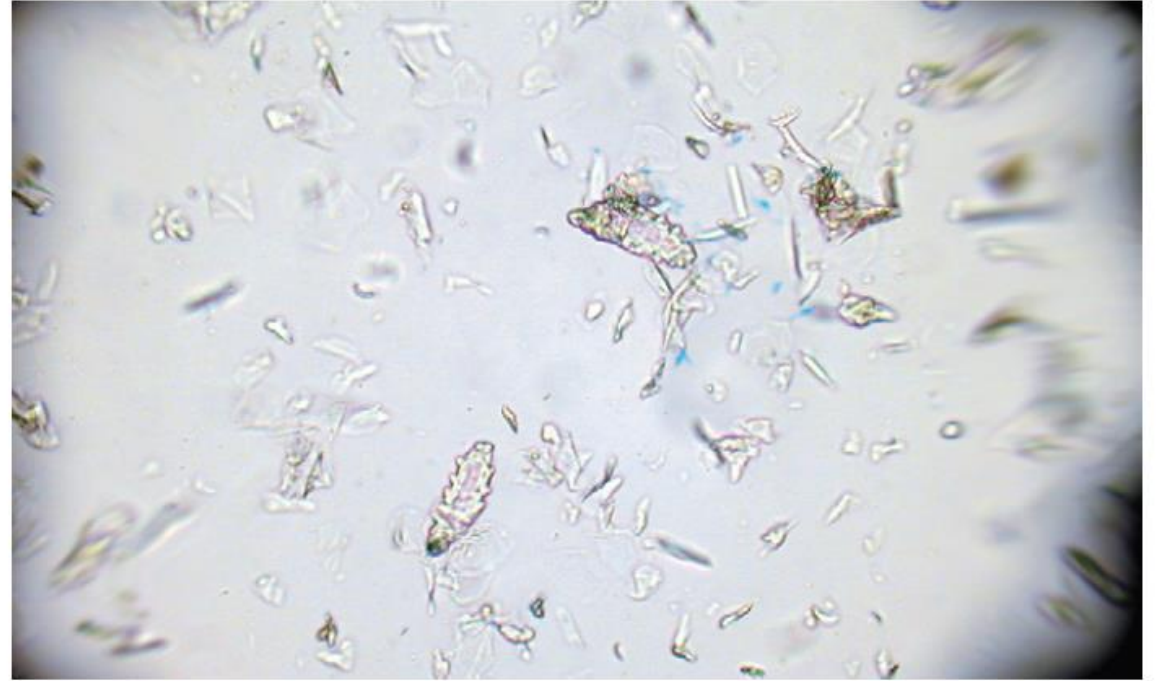


**FIGURE 5-22** Canine Generalized Demodicosis. Alopecia and papular dermatitis with a large erosive lesion.





**FIGURE 5-25** Canine Generalized Demodicosis. Microscopic image of *Demodex* mites, as seen with a 10× objective.



**FIGURE 5-26** Canine Generalized Demodicosis. Microscopic image of *Demodex* mites, as seen with a 10× objective.



# Symptoms - Scabies

1. Papules, alopecia, erythema, crusts
2. Initially starts at less hairy parts – **Pinnal margin**, hock, elbow, ventral abdomen
3. Then it spreads over the body, **usually dorsum of back is spared.**



**FIGURE 5-41 Canine Scabies.** Generalized alopecia with crusting papular dermatitis affecting the head and neck of a young adult dog. Note that the ear margins are severely affected.



**FIGURE 5-42 Canine Scabies.** Generalized alopecia and crusting affecting a pruritic puppy. Alopecic ear pinnae are characteristic of scabies.



**FIGURE 5-49 Canine Scabies.** Microscopic image of scabies mite, as seen with a 40× objective.

# Diagnosis – Demodicosis, Scabies

1. Skin scrapping examination
2. Scratch Test/Anal pedal Reflex  
– Scabies
3. DD – Hypersensitivity,  
Endocrinopathy, Pyoderma,  
Malassezia dermatitis



# Treatment Principles

1. The protocol should be continued for at least 1 month beyond the time when 2 consecutive skin scraping tests are negative
  - a) Clinical Improvement – 1 to 1.5 months
  - b) 1<sup>st</sup> Negative – 1.5 to 2 months
  - c) Most patient need approximately 3 months treatment
2. Underlying cause should be treated
3. Corticosteroid therapy stopping – Demodicosis
4. Secondary infections should be treated first.

# Treatment - Topical

- Benzyl Peroxide Shampoo bathing – every 3-7 days
- 0.025 – 0.3% Amitraz Solution – every 2 weeks
- Fipronil Spray – every 2 weeks
- Metaflumizone + Amitraz (PROMERIS) – every 2 weeks

# Treatment – Ticks, Flea, Lice

Drug	Dose (Demodicosis)	Dose (Scabies)
Ivermectin	0.2 – 0.6 mg/Kg PO q24h Cure rate – 85-90%	0.2 – 0.4 mg/Kg PO q7d 0.2 – 0.4 mg/Kg SC q14d
Milbemyacin Oxime	0.5 mg/Kg PO q24h Cure rate – 85-90%	0.75 mg/kg PO q24h 2 mg/Kg PO q7d
Doramectin	0.2 – 0.6 mg/Kg SC q7d Cure rate – 85%	0.2 – 0.6 mg/Kg SC q7d

[Parasite](#). 2016; 23: 14.

Published online 2016 Mar 24. doi: [10.1051/parasite/2016014](https://doi.org/10.1051/parasite/2016014)

PMCID: PMC4807374

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## Efficacy of oral afoxolaner for the treatment of canine generalised demodicosis

[Frédéric Beugnet](#)<sup>1,\*</sup>, [Lénaïg Halos](#)<sup>1</sup>, [Diane Larsen](#)<sup>1</sup> and [Christa de Vos](#)<sup>2</sup>

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### Abstract

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The efficacy of oral treatment with a chewable tablet containing afoxolaner 2.27% w/w (NexGard<sup>®</sup>, Merial) administered orally was assessed in eight dogs diagnosed with generalised demodicosis and compared with efficacy in eight dogs under treatment with a topical combination of imidacloprid/moxidectin (Advocate<sup>®</sup>, Bayer). Afoxolaner was administered at the recommended

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Back to Top



# 2016 - FRANCE

1. Comparison – Oral Afoxolaner Vs Imidacloprid + Moxidectin Spot On
2. Oral Afoxolaner found to be better

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Articles

## Diagnosis and Therapeutic Management of Canine Demodicosis in Saurashtra Region of Gujarat

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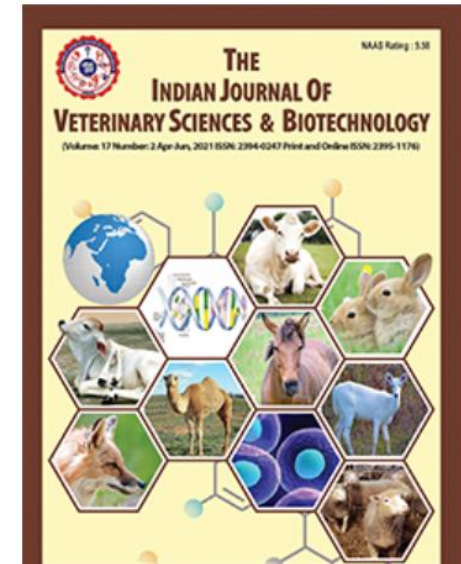
2022-09-15

HOW TO CITE

Satasiya, C.G., Vagh, A.A., Bilwal, A.K., Bhatt, R.H., & Parasana, D.K. (2022).  
Diagnosis and Therapeutic

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# 2022 - INDIA

1. Group I – Control
2. Group II – Amitraz + Ivermectin
3. Group III – Safrone Oil + Tablet
4. Group IV – Fluralaner
5. Group II > Group IV > Group III

[Can Vet J.](#) 2022 Nov; 63(11): 1159–1162.

PMCID: PMC9558591

PMID: [36325416](#)

## Isoxazolines for treating canine demodicosis, sarcoptic mange (scabies), and lice infestation

[Vincent E. Defalque](#)<sup>✉</sup>

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In 2014, a new class of parasiticides was introduced to the Canadian small animal health market. Isoxazoline drugs include afoxolaner, fluralaner, lotilaner, and sarolaner. A plethora of oral and topical spot-on products are now commercially available and contain either a single isoxazoline or an isoxazoline in combination with 1 or 2 other active ingredient(s). There are geographical differences in the availability and licensure of these drugs. Therefore, one must judiciously consider regional prescribing recommendations. Isoxazolines currently available for use in dogs in Canada are listed in [Table 1](#).

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# 2022 - CANADA

1. Canine demodicosis – **1** oral or topical dose of **fluralaner**; **3** monthly oral doses of **afoxolaner/lotilaner/sarolaner**
2. Canine sarcoptic mange (scabies) – **1** oral or topical dose of **fluralaner**; **1** oral dose of **afoxolaner**; **2** monthly oral doses of **lotilaner/sarolaner**
3. Canine lice infestation – **1** oral or topical dose of **fluralaner**; **1** oral dose of **sarolaner**

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