

Epidemiological Data: Conducting Field Studies Testing Parasiticides in Pets

Hellmann, K.*, T. Knoppe*, L. Bettinelli* and C. Epe**
KLIFOVET AG, Munich, Germany
Veterinary School, Institute for Parasitology, Hanover, Germany

18th International Conference of the
World Association for the Advancement of
Veterinary Parasitology
Stresa, 26 - 30 August 2001

Studies Testing Parasiticides in Pets:

- Twelve studies: 6 in Dogs, 6 in Cats
 - Endoparasites: 3 in Dogs, 3 in Cats
 - Ectoparasites: 3 in Dogs, 3 in Cats
- Period: 1997 to 2001
- Enrolment periods: 1 month up to 1 year

Monitoring Efforts

- Intensive Training
- Frequent Visits
- Daily/Regular Contact to Investigators
- Motivation of Investigators

All studies strictly conducted to GCP

Studies on Endoparasites:

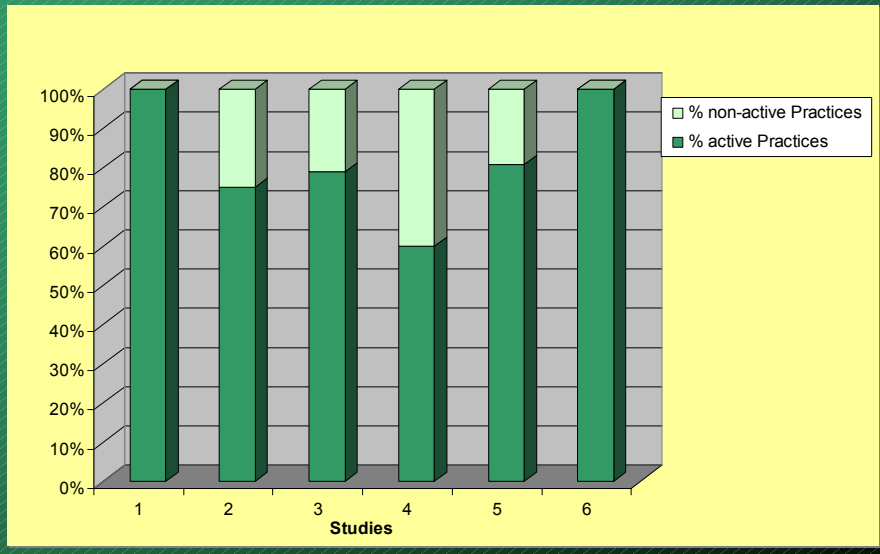
- Monitored 87 investigators (68 enrolled)
- 2 Laboratories involved (F, D)
- 5581 Faecal samples screened
- 514 Patients enrolled

Concentrate on Endoparasite Studies as Ectoparasite work was presented in Copenhagen

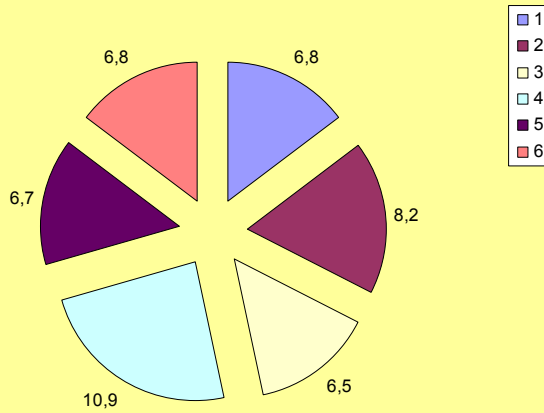
Some Data on the Challenge to Conduct Field Studies

- „Active Investigators“
- Patients enrolled per „Active Practice“
- Completers versus Non-Completers
- Reasons for Non-Completers

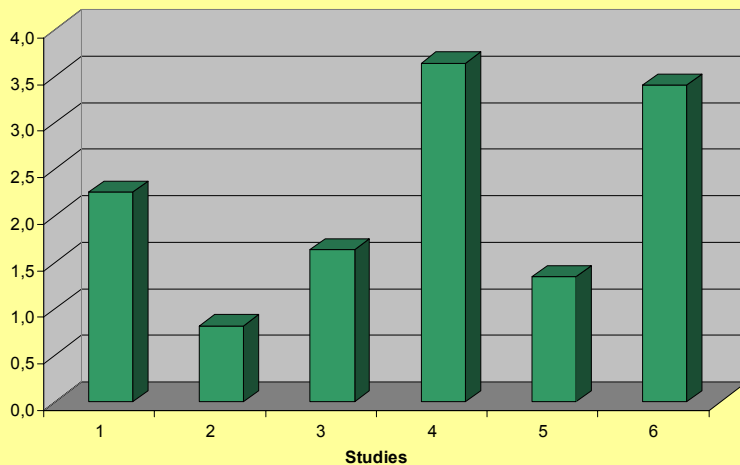
Percent Active Practices



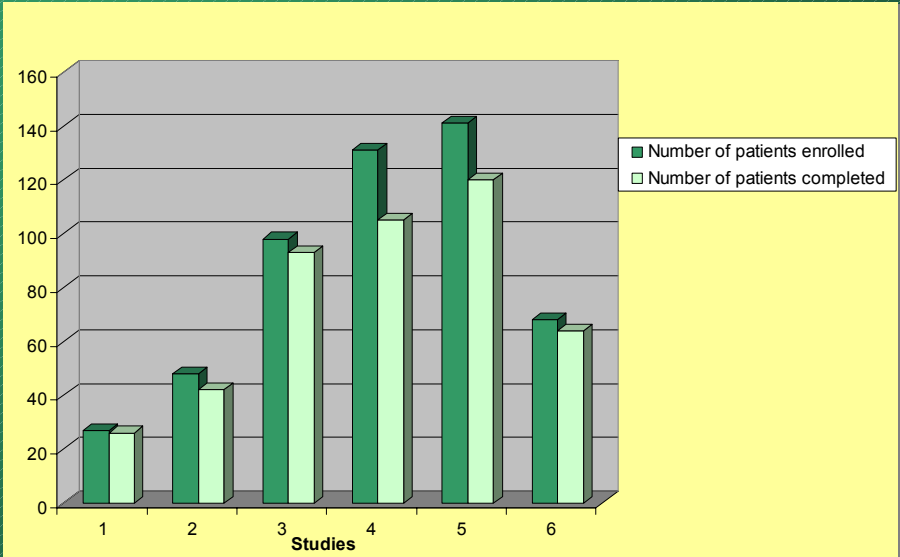
Patients enrolled per Active Practice per Study



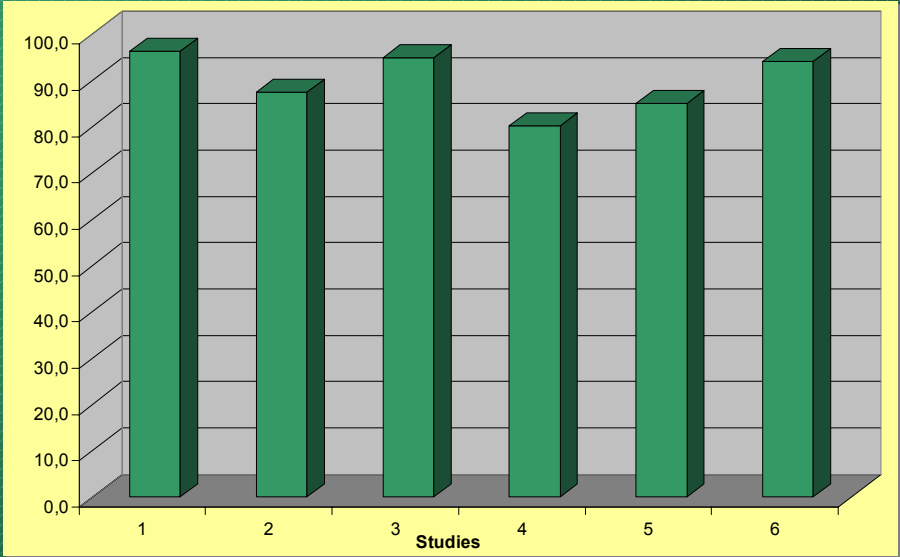
Number of Patients enrolled per Practice/Month



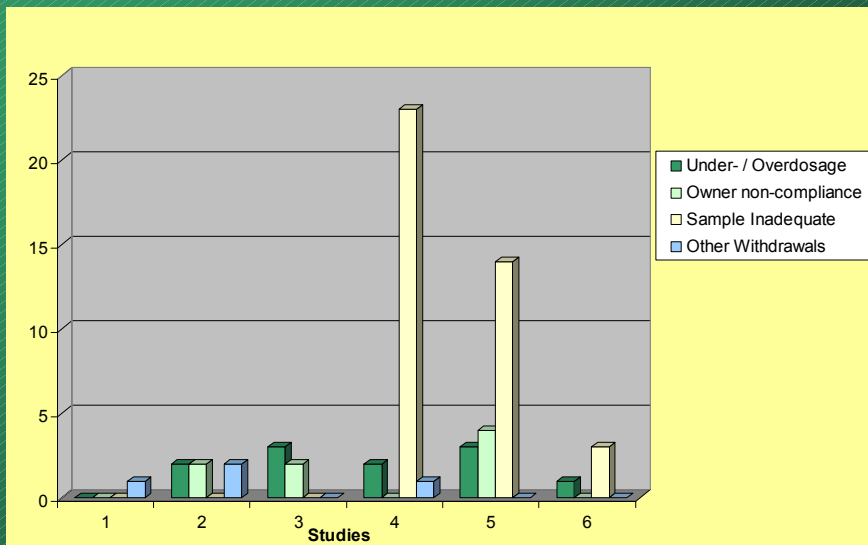
Patients Enrolled and Completed



Percentage Completers



Reasons for Non-Completers

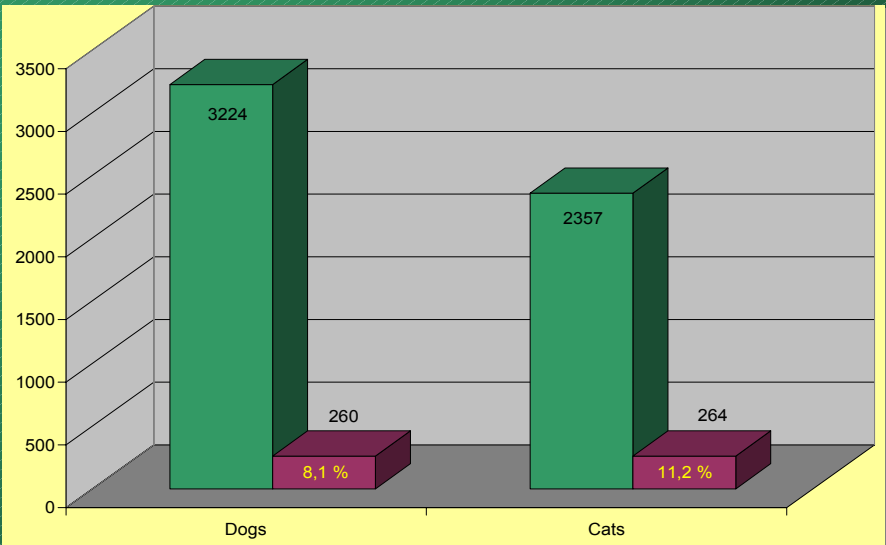


Epidemiological Data

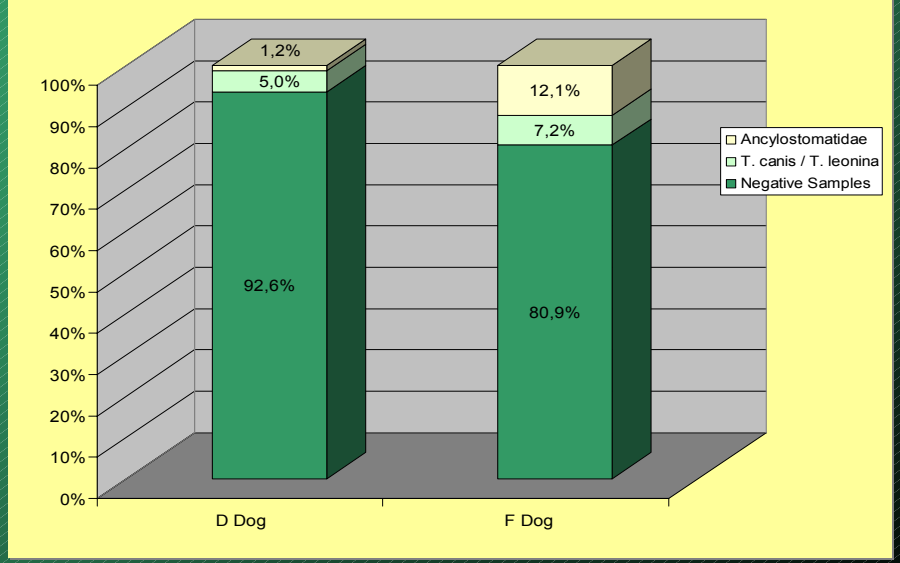
- Presenting data from 6 different studies
- Different study objectives, but always efficacy for *Toxocara/Toxascaris* involved
- Focus on Endoparasites
- McMaster technique used in all studies
- D: Bavaria and North-East
- F: Burgundi and South-East

Data may underestimate certain parasites!

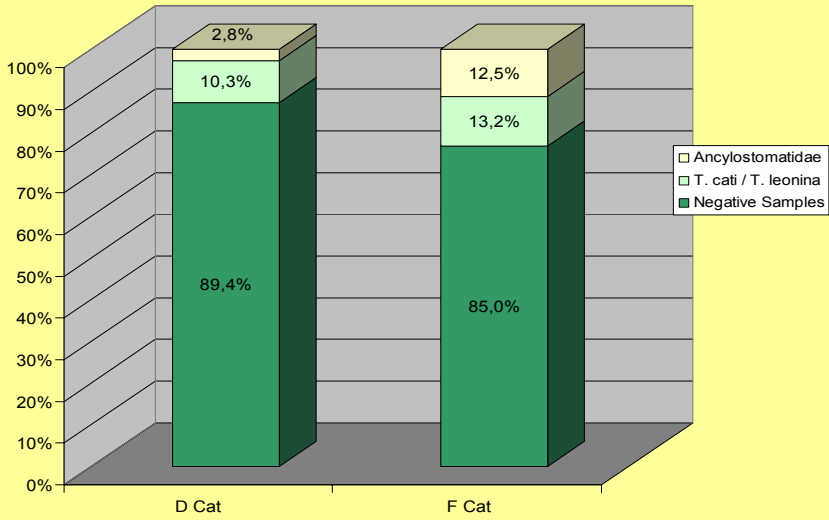
Prevalence of Endoparasite Infestations



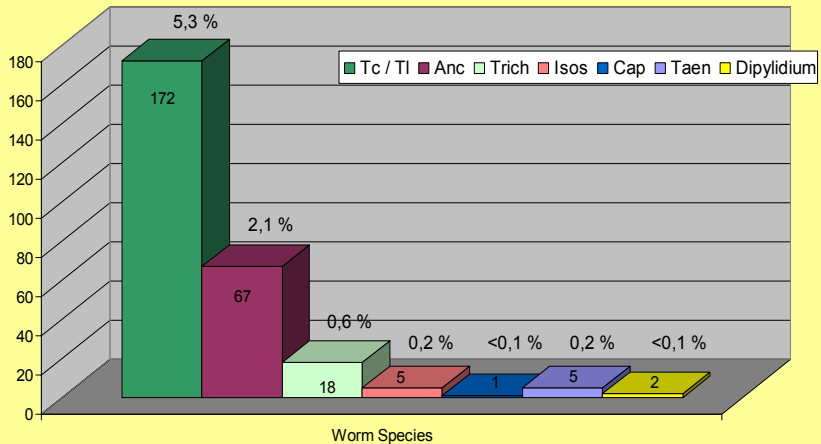
Prevalence of Nematodes in D and F (dogs)



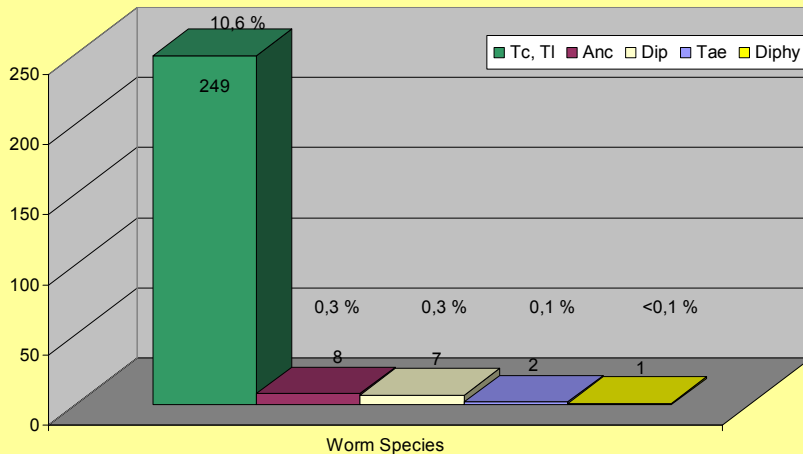
Prevalence of Nematodes in D and F (cats)



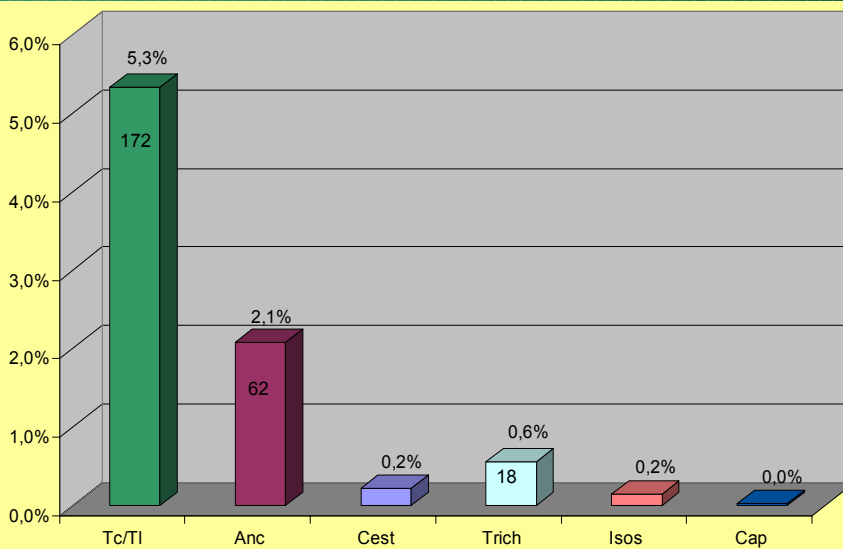
Endoparasites in Dogs (n = 260)



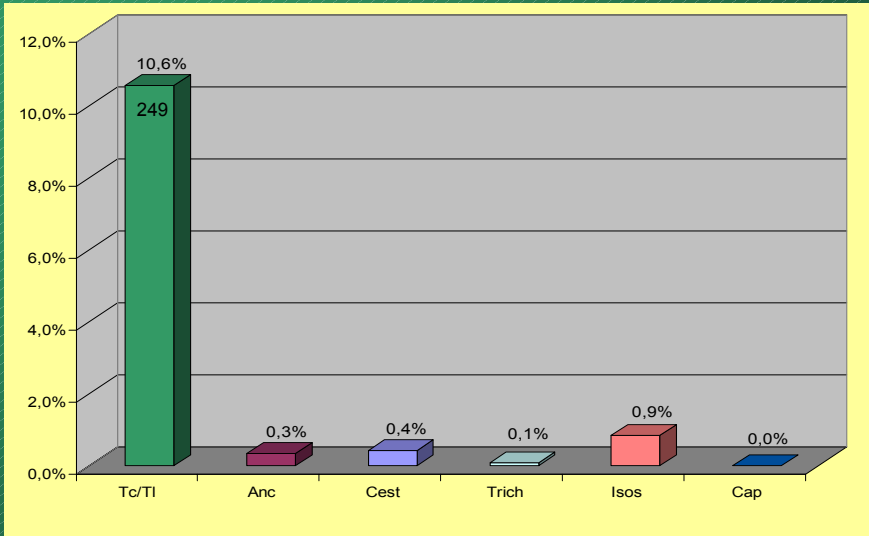
Endoparasites in Cats (n = 264)



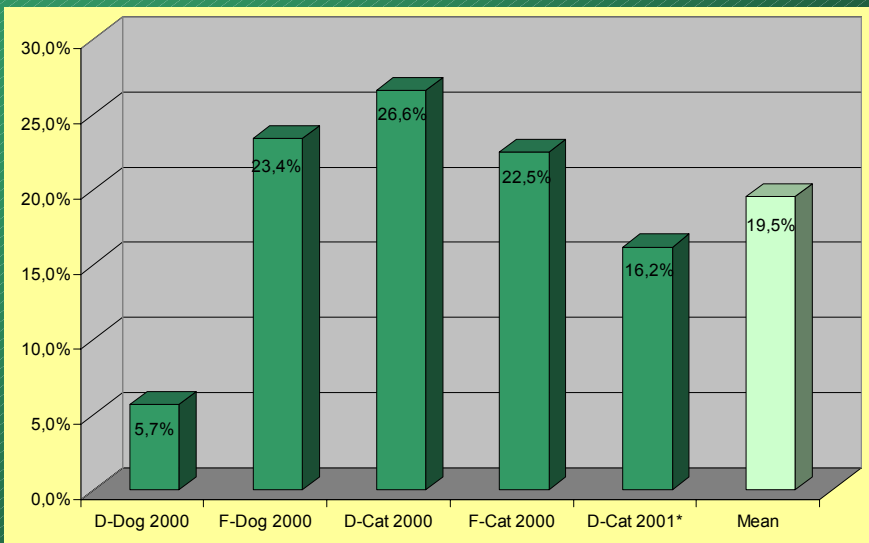
Prevalence of Endoparasites in Dogs



Prevalence of Endoparasites in Cats

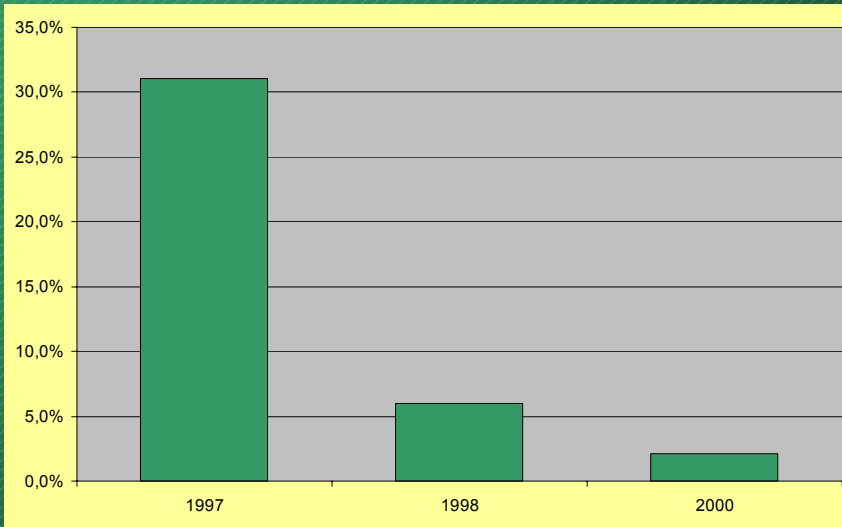


Concurrent Flea Infestation



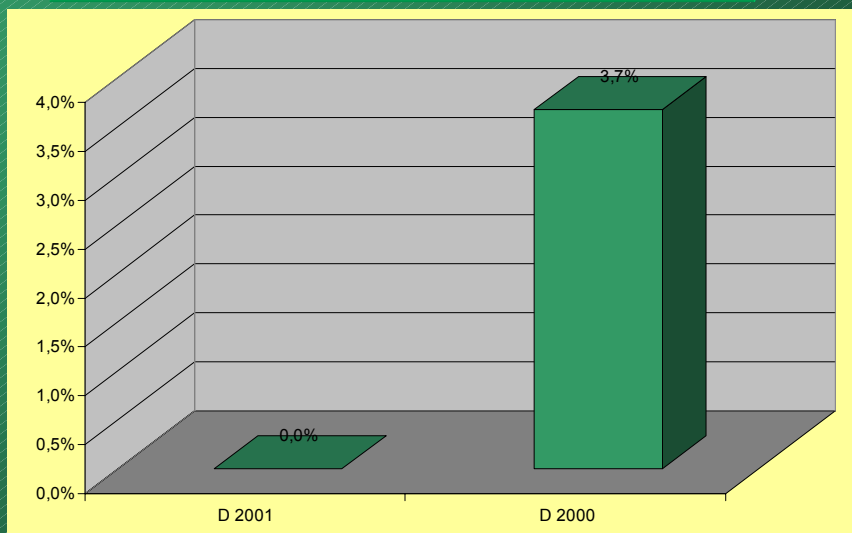
Mixed Infestations in Dogs

(1997: n = 29; 1998: n = 117; 2000: n = 143)

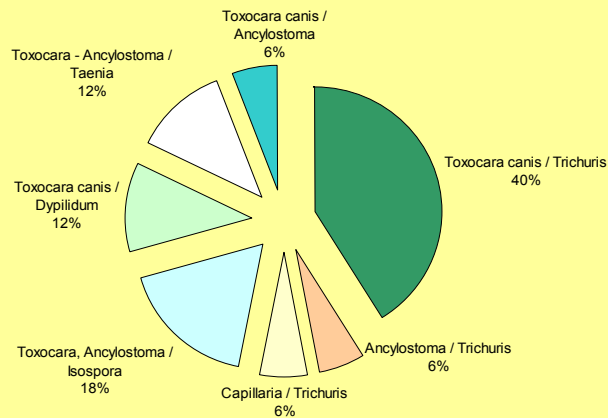


Mixed Infestations in Cats

(D 2001: n = 68; D 2000: n = 148)



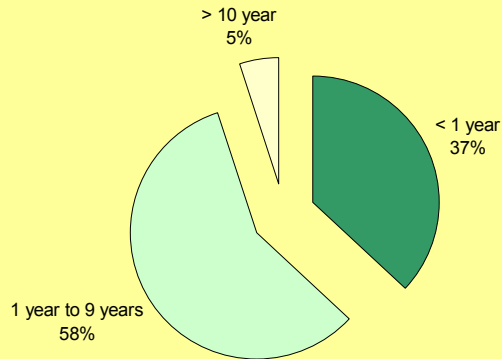
Composition of Mixed Infestations in Dogs (n = 19)



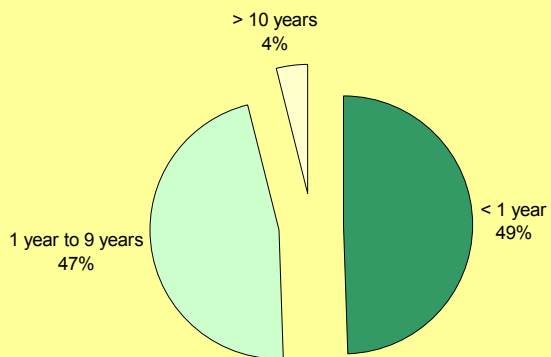
Reasons for Low Values

- Objective of Studies: focus on *T. cati/cani*
- Diagnosis using McMaster technique does not always reflect the total worm burden:
 - Nematodes: No permanent excretion of „Eggs“
 - Tapeworms:
 - No permanent excretion of „Eggs“
 - Observation of proglottides more frequent
- Negative sample does not allow final conclusion!

Age of Infested Dogs (n = 160)



Age of Infested Cats (n = 141)



Conclusions

- Monitored 87 investigators in F and D
- ~10 animals per site can be enrolled
- Dogs: 8.1 % positive faecal samples, 5.0 % Tc/TI
- Cats: 11.2 % positive faecal samples, 10,3 % Tc/TI
- Infestations present in all age-groups
- Mixed infestations of different worms occur, including tapeworms, but low prevalence
- Diagnostics for field work not ideal for tapeworm
- 19.5 % Concurrent flea infestations in dogs and cats
- Indications for broad spectrum parasiticides present
- Negative faecal egg count samples do not allow conclusions!

Thank You !

- All participating Vets in Germany and France
- Laboratoires Vebiotel, Paris, France
- Institute for Parasitology, Hanover, Germany
- Dr. Francis Pothier, Clermont-Ferrand, France
- Involved Sponsors as the legal owners of this data



Thank you!

KLIFOVET AG
www.klifovet.com

Tel: +49 89 58 00 82 0

Fax: +49 89 58 00 82 15

Email: klaus.hellmann@klifovet.com