ENDOPARASITES OF CHAMOIS AT THE AREA OF GORSKI KOTAR – PRELIMINARY RESULTS

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INTRODUCTION

- Croatian Science Foundation grant ''DNA as evidence of distribution and vitality of threatened Balkan chamois''
- Active surveillance
- Understanding of parasite fauna

MATERIAL AND METHODS

- Location - Gorski kotar
- Complete GI system of 12 chamois (2 females)
- Samples were analyzed according to segments: duodenum, ileum, jejunum, caecum and colon (colon and rectum)
- Intestines were incised longitudinally, washed out and content was analyzed in sieves with different mesh size (0.5 and 0.2 mm)

MATERIAL AND METHODS

- Parasites were stored in Eppedorf vials
- Sample of faeces was submited for standard coprological examination and IF for *Giardia* sp.
- Cysts found on mesenterium were collected and stored till determination of genus and species

RESULTS

		Abomasum	Colon			Other	
		H. contortus	*Trichuris ovis*	*Chabertia ovina*	*Oesophagostomum venulosum*	*Cysticercus tenuicollis*	Parasites
Rupicapra rupicapra	DK1		X		X		X
	DK2				X		X
	DK3						
	DK4		X	X	X	X	X
	DK5		X		X		X
	DK6	X			X		X
	DK7				X	X	X
	DK8					X	X
	DK9				X	X	X
	DK10		X	X			X
	DK11	X			X		X
	DK12						
Prevalence		17%	33%	17%	67%	33%	83%

RESULTS

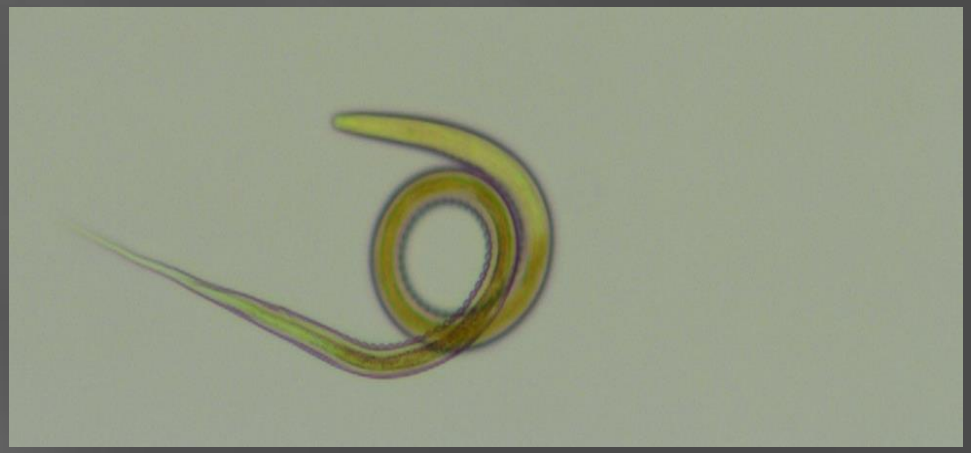
		Protostrongylidae	*Strongylida*	*T. ovis*	*Eimeria* sp.	*Capillaria* sp.	*Nematodirus* sp.	*Marshallagia marshalli*	Parasites
Rupicapra rupicapra	DK1								BU
	DK2								BU
	DK3		X			X			X
	DK4	X	X						X
	DK5			X			X		X
	DK6	X							X
	DK7						X		X
	DK8	X			X				X
	DK9	X					X	X	X
	DK10	X			X				X
	DK11	X							X
	DK12								
Prevalence		60%	20%	10%	20%	10%	30%	10%	90%

RESULTS

- Most frequent – nematodes
- Trematodes were not detected
- Cestodes were present only as developmental stages
- All samples were negative for *Giardia* sp. – prevalence in Alpine population was 4%

DISCUSSION

- *Haemonchus contortus* was determined in available stomachs.
- Adult trichostrongylids were not found, eggs were present in 2 samples (20%)
- Studies performed in Switzerland showed that strongylid eggs can be found in almost 90% of faecal samples



- Haemonchosis is mainly acute or chronic disease.
- Acute – severe anaemia, generalized oedema
- Chronic – anaemia, progressive weight loss

DISCUSSION

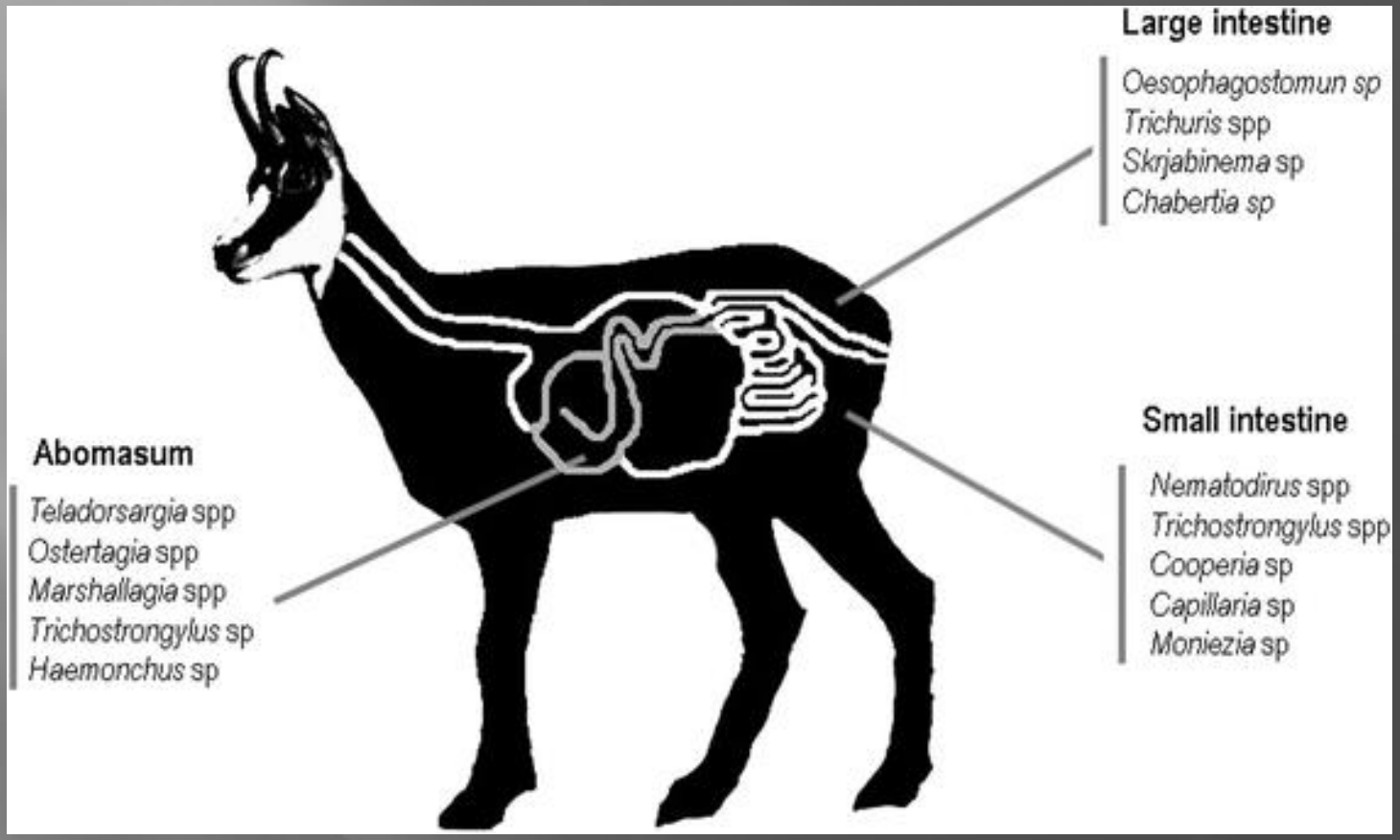
- Parasites of the large intestine
- *Trichuris ovis, Chabertia ovina, Oesophagostomum venulosum*
- Obtained results are in accordance with similar research in the case of *Oesophagostomum* (P = 67%), but with higher prevalence of *T. ovis* (P=33%) and *C. ovina* (P=17%)

- Generally, these parasites do not cause any disease
- In severe infestations *T. ovis* are known to induce bloody diarrhoea, dehydration and loss of apetite

DISCUSSION

- Only eggs of *Nematodirus* sp. (P=30%), *Capillaria* sp. (P=10%) and *Marshallagia marshalli* (P=10%) were determined
- 60% of feacal samples contained lungworm larvae, most probably of the genus *Muellerius* (*Neostrongylus, Protostrongylus*).
- Implications for young animals –*Nematodirus* nematodes are capable of inducing profuse diarrhoea; small lungworms are cause of bronchopneumonia, but mainly of bronchitis with weak clinical signs

DISCUSSION



Martínez-Guijosa et al. (2015): Parasites & Vectors 8:165

DISCUSSION

- Finding of *Cysticercus tenuicollis*, developmental stages of *Taenia hydatigena* (P=33%)
- Studies of parasitic fauna of grey wolves in Gorski kotar and Velebit region confirmed the presence of *T. hydatigena* eggs in only 1.5% of samples
- Further research is required to enlighten the role of chamois in life cycle of *T. hydatigena*

Thanks for attention