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ABSTRACTS

SESSION 10 – BAKTERIOLOGIE / PARASITOLOGIE

45 Helminth Egg Deposition in the Antique Harbour of Ephesos

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The backfill of the antique harbour of Ephesus is not only attributed to a natural siltation by sediments of the nearby river Kaystros, but also to the anthropogenic deposition of waste materials, which the city's inhabitants dumped into the harbour basin for half a millennium. Sediments of municipal waste water still contain relics of pathogens, in particular eggs of some intestinal helminths. The following biofacts were detected in drill core samples from the area of the antique harbour basin: eggs of whipworms, eggs of human and/or porcine roundworms, eggs of nematodes of grazing livestock, eggs of *Heterophyes heterophyes*, eggs of *Capillaria obsignata*, structures resembling *Diphyllobothrium* eggs, eggs and a scolex hook of *Taenia* sp., and eggs and spines of thorny-headed worms.

The harbour basin served as a disposal site for the municipal waste water from its construction onward until the sixth century. The effects of the sewage disposal were undoubtedly a high abundance of food-borne infectious diseases among the inhabitants of the city. The heavily contaminated harbour water formed a hygienically risky hatchery for zoonotic pathogens, reservoir hosts and vectors. The city's inhabitants solved the problem of individual faeces removal by means of a sophisticated system of canals and horizontal flow latrines, but the municipality was not able to dispose of the waste water in such a way that the odour nuisance and the health hazards of the citizens of Ephesos were stopped.

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