

Article

Evaluating the Role of Corrals and Insects in the Transmission of Porcine Cysticercosis: A Cohort Study

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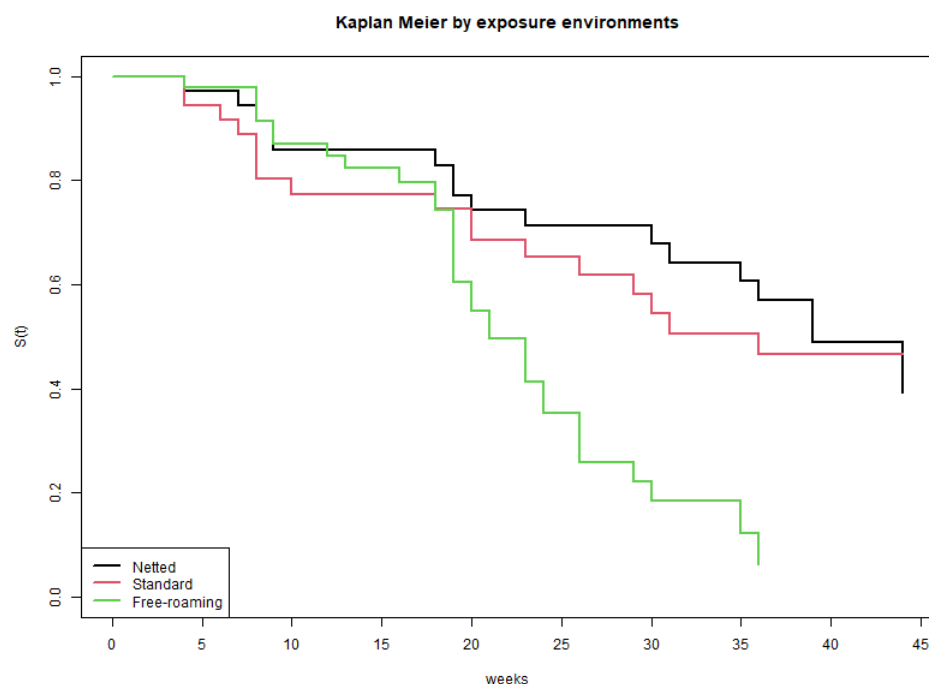


Figure S1. Kaplan Meier survival curve with the time to develop a EITB positive result between the three kinds of exposure environments evaluated: netted corrals, standard corrals, and free roaming.

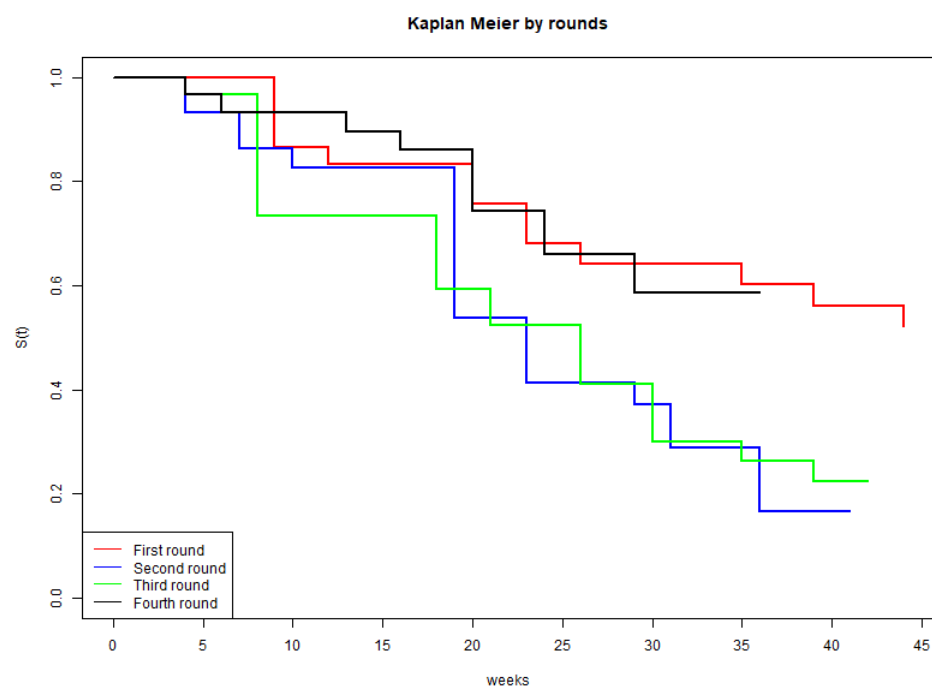


Figure S2. Kaplan Meier survival curve with the time to develop a EITB positive result between the four rounds evaluated.

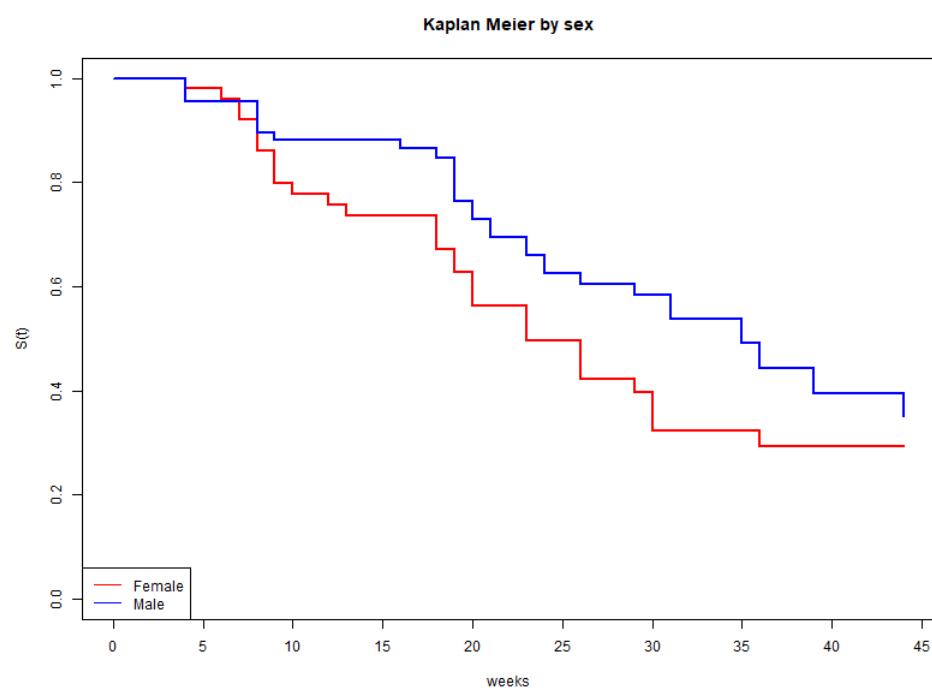


Figure S3. Kaplan Meier survival curve with the time to develop a EITB positive result between sex (male in blue and female in red) of pigs.

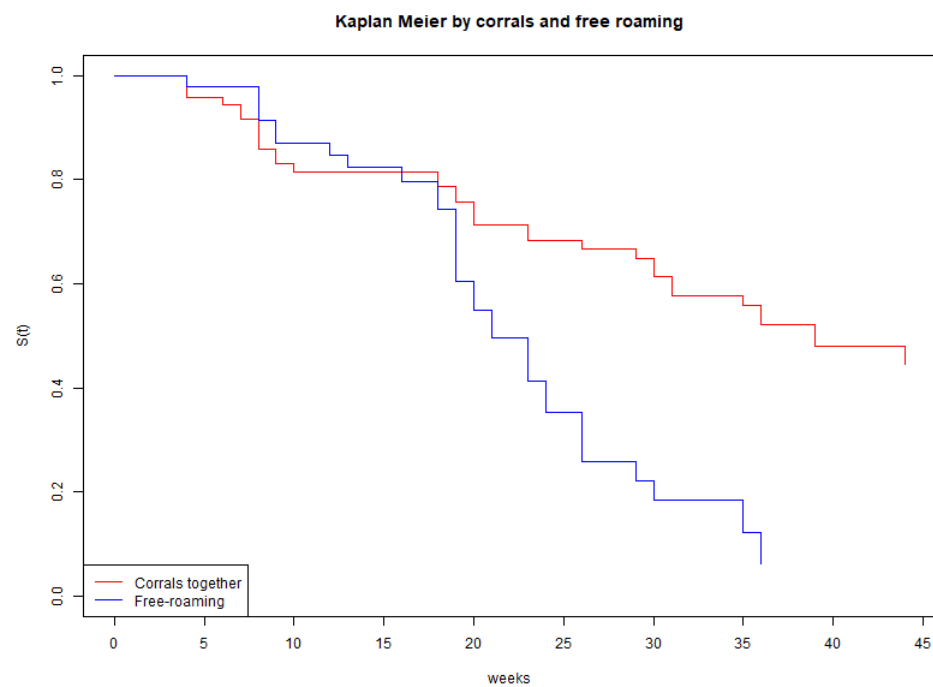


Figure S4. Kaplan Meier survival curve with the time to develop a EITB positive result between corral groups (red) and free-roaming (blue).

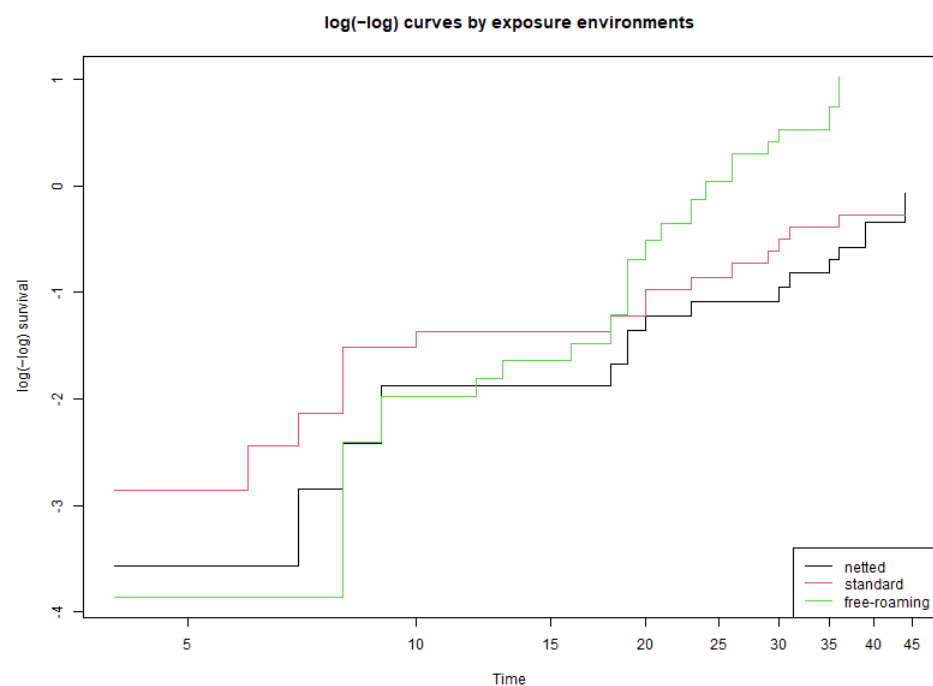


Figure S5. Estimated $-\ln(-\ln) \log(-\log)$ survivor curves over the three categories of breeding system. Parallel curves are not observed which assumes Proportional hazard is not satisfied.

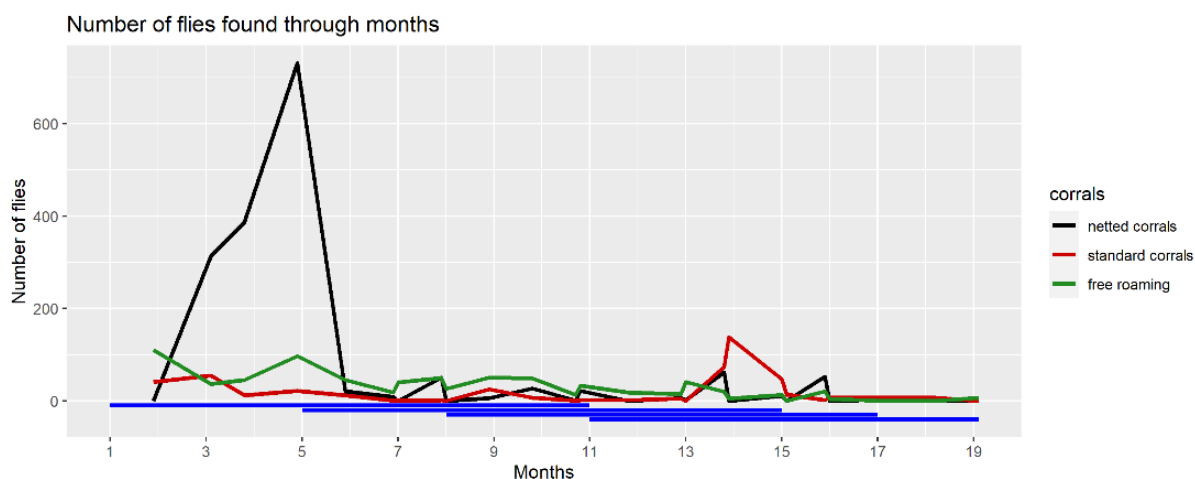


Figure S6. Number of flies caught through time (months) in the three breeding systems, blue lines at the bottom correspond to each round.

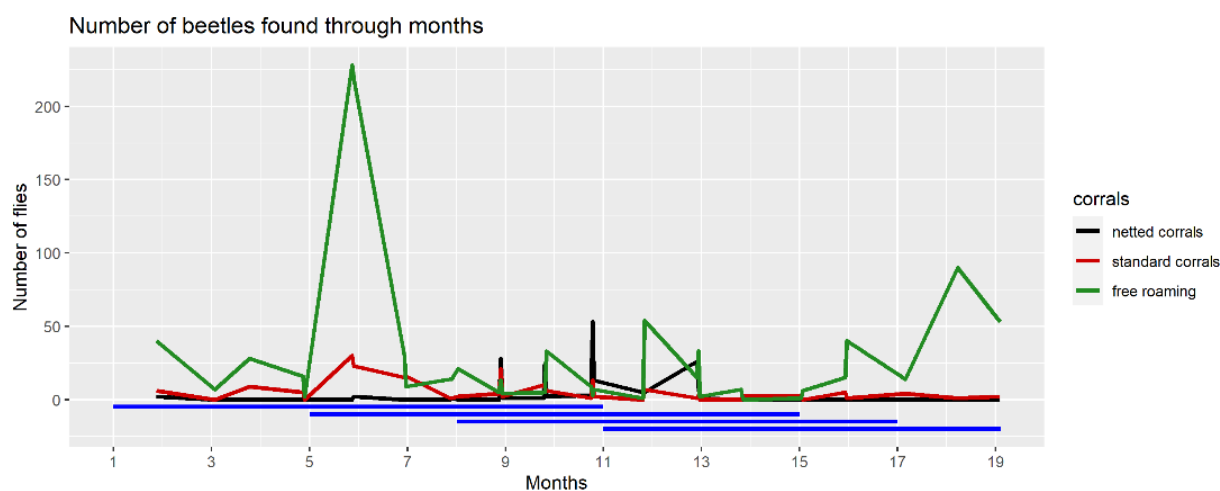


Figure S7. Number of beetles caught through time (months) in the three breeding systems, blue lines at the bottom correspond to each round.

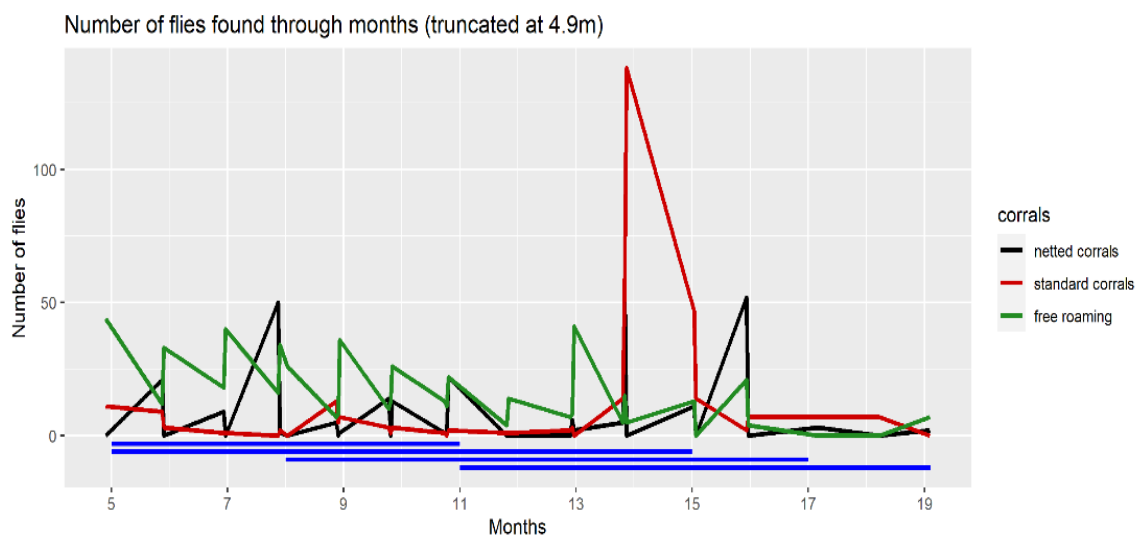


Figure S8. Number of flies caught through time (from 4.9 months into the study) in the three breeding systems, blue lines at the bottom correspond to each round.

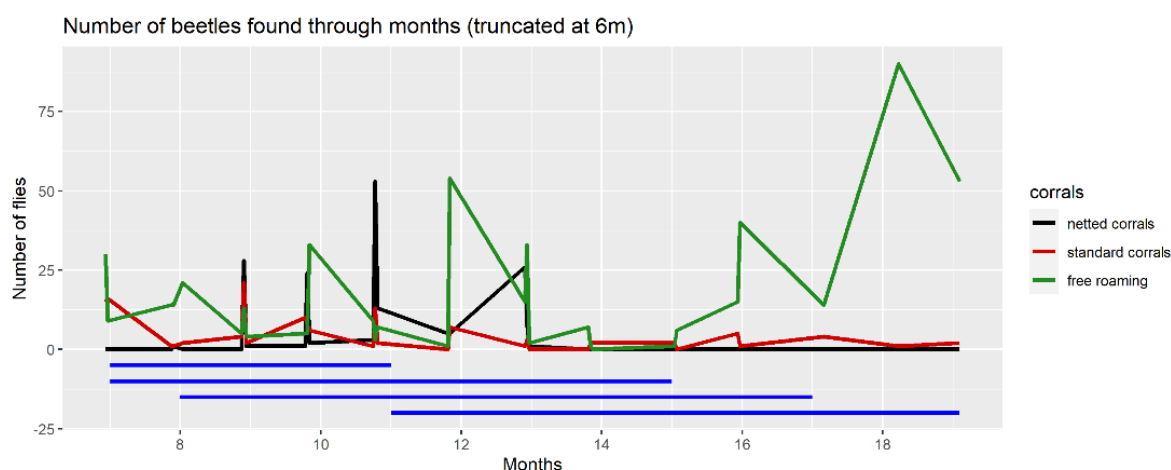


Figure S9. Number of flies caught through time (from 6 months into the study) in the three breeding systems, blue lines at the bottom correspond to each round.

Table S1. Cox proportional hazard model with three independent variables: breeding system, rounds and sex.

| Variable | PH* | lower 0.95 | upper 0.95 | p-value |
|---------------------|------|------------|------------|---------|
| Groups | | | | |
| Standard/Netted | 1.30 | 0.66 | 2.58 | 0.4 |
| Free roaming/Netted | 3.18 | 1.70 | 5.97 | 0.0003 |
| Sex | | | | |
| Male/Female | 0.62 | 0.38 | 1.01 | 0.056 |
| Round | | | | |
| Second / First | 2.62 | 1.27 | 5.41 | 0.009 |
| Third / First | 2.40 | 1.18 | 4.91 | 0.016 |
| Fourth / First | 0.99 | 0.42 | 2.33 | 1.0 |

*PH: Proportional hazard.

Table S2. Goodness of fit for the model in Table S2.

| Variable | chisq * | df | p-value |
|----------------------|---------|----|---------|
| Exposure environment | 12.96 | 2 | 0.002 |
| Sex | 1 | 1 | 0.3 |
| Round | 1.06 | 3 | 0.8 |
| Global | 14.57 | 6 | 0.02 |

* Chi-squared test.

Table S3. Goodness of fit for the model in Table 2.

| Variable | chisq * | df | p-value |
|---|---------|----|---------|
| Round | 2.03 | 3 | 0.57 |
| Sex | 1.03 | 1 | 0.31 |
| Free roaming /Corrals (before 18 weeks) | 1.41 | 1 | 0.24 |
| Free roaming /Corrals (after 18 weeks) | 0.27 | 1 | 0.6 |
| Global | 4.31 | 6 | 0.63 |

* Chi-squared test.

Table S4. Maximum number of reactive bands observed on the LLGP-EITB test throughout the observation period, among pigs in each exposure environment.

| Environment | <i>T. solium</i> cysts at necropsy | number of maximum bands | | | |
|-----------------|------------------------------------|-------------------------|-----|---|-----|
| | | 0 | 1–2 | 3 | 4–7 |
| Netted corral | no | 19 | 15 | 1 | 0 |
| | yes | 0 | 0 | 0 | 0 |
| Standard corral | no | 20 | 13 | 2 | 1 |
| | yes | 0 | 0 | 0 | 0 |
| Free roaming | no | 7 | 11 | 4 | 0 |
| | yes | 2 | 5 | 5 | 3 |

Table S5. Number of pigs infected with *T. solium* by rounds (only in free roaming).

| Rounds | Negative | Positive |
|--------|----------|----------|
| First | 8 | 0 |
| Second | 6 | 4 |
| Third | 3 | 7 |
| Fourth | 5 | 4 |

Pearson's Chi-squared test, p -value = 0.027.

Table S6. Number of pigs infected with *T. solium* by sex (only in free roaming).

| | Negative | Positive |
|--------|----------|----------|
| Female | 9 | 6 |
| Male | 13 | 9 |

Pearson's Chi-squared test, p -value = 1.

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