**Table S2**. Epidemiological studies of tick infestation in birds in Europe

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **COUNTRY** | **TICK PREVALENCE** | **AREA** | **YEAR** | **CAPTURE**  **PERIOD** | **BIRDS**  **CAPTURED** | **BIRD**  **SPECIES** | **BIRDS**  **INFESTED** | **COLLECTED**  **TICKS** | **TICK**  **SPECIES** | **TICK**  **LOADS** | **MOST INFESTED**  **BIRD SPECIES** | **REFERENCE** |
|  | (%) |  |  | (months) | (No.) | (No.) | (No.) | (No.) | % all ticks | Ticks/infest.bird |  |  |
| **Poland** | **4.4** | 1 ornithological station | 2021 | 2 (autumn) | 3,903 | 55 | 173 | 335 | *I. ricinus*  (80%) | **1.9**  (335/173) | *Turdus philomelos*  *Turdus merula*  *Erithacus rubecula* | Zajac et al., 2022 |
| **Finland** | N/A | 11 bird ringing | 2018 | 8 (spring-autumn) | 193 | 32 |  | 430 | *I. ricinus*  (98%) | 1.0 to 7.3  (bird species) | *Turdidae*  *Erithacus rubecula* | Sormunen et al., 2022 |
| **Italy** | N/A | 3 Islas | 2017-19 | 36 (spring seasons) | 48,500 |  |  | 2,344 | *Hyalomma* |  |  | Toma et al., 2021 |
| **Greece** | **1.7** | 4 localities (North) | 2013 | 4 (summer, autumn) | 403 | 52 | 7 | 15 | *I. frontalis*  *I. acuminatus* | 1-5 | *Turdus merula*  *Erithacus rubecula* | Diakou et al., 2016 |
| **Germany** | **3.0** | 25 (6 Federal States) | 2008-10 | 30 | 23,949 | 48 | 725 | 3,195 | *I. ricinus*  *I. hexagonus* | **3.8**  (3,195/838) | *Turdus merula*  *Turdus philomelos* | Klaus et al., 2016 |
| **Portugal** | N/A | 19 Counties | 2010-14 | 48 | 435 | 38 |  | 1,349 | *I. frontalis*  *I. ricinus*  *Hyalomma* |  | *Turdus merula* | Norte et al., 2015 |
| **Sweden** |  | 1 bird observatory | 2009 |  | 5,365 | 65 | 748 | 1,335 | *Ixodes* spp.  (83%) | **1.8**  (1,335/748) | *Anthus trivialis,*  *Luscinia luscinia*  *Turdus merula* | Sandelin et al., 2015 |
| **Italy & Greece** |  | 2 isles | 2009-10 | 6 (spring) | 14,789 |  | 463 |  | *H. marginatum* |  |  | Wallmenius et al., 2014 |
| **Russia** | **18.5** | Baltic region | 2009 | (spring) | 577 | 38 | 107 | 212 | *I. ricinus*  *I. frontalis*  *Hyalomma* | **0.4**  (212/107) | *Erithacus rubecula* | Movila et al., 2013 |
| **Portugal** | **32.4 – 16.7** | 2 mixed forest (West) | 2010-11 | 12 | 953 | 37 |  | 1,122 | *I. ricinus*  *I. frontalis*  *H. punctata* |  | *Turdus merula*  *Sturnus unicolor*  *Erithacus rubecula* | Norte et al., 2012 |
| **Scotland** |  | 1 area | 2007 | 7 (summer, autumn) | 1,229 | 22 |  | 165 | *I. ricinus* |  | *Turdus merula* | James et al., 2011 |
| **Czechia** | **41.1** | 1 locality (Certak) | 2005 | 2 | 1,084 |  | 446 | 2,240 | *I. ricinus* | **5.1**  (2,240/562) | *Turdus merula*  *Prunella modularis*  *Turdus philomelos* | Dubska et al., 2009 |
| **Moldova** | **31.9** | 1 forest reserve | 1995-97 |  | 474 | 10 | 151 | 539 | *I. ricinus*  (82%) |  | Blackbirds | Movila et al., 2008 |
| **Slovakia & Czechia** | **36.7** | 3 and 1 woodlands | 2001-02 |  | 529  (345 & 184) | 40 | 194 | 1,461 | *I. ricinus* |  | *Turdus merula*  Turdus philomelos |  |
| **Switzerland** | **18.2** and **6.0** | 2 sites | 2002 | 5 (spring-autumn) | 1,270 |  | 180  17 | 417  33 | *I. ricinus*  (91%) | **2.3** (417/180)  **1.9** (33/17) | *Erithacus rubecula* | Poupon et al., 2006 |
| **Switzerland** | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 6,136 | *I. ricinus* | N/A | *Erithacus rubecula*  *Turdus merula* | Papadopoulos et al., 2001 |
| **Sweden & Denmark** | **2.0** | 7 bird observatories | 1991 | 7 (spring-autumn) | 22,998 | 42 | 465 | 967 | *I. ricinus* | **2.1**  (967/465) |  | Olsen et al., 1995 |
| **Switzerland** | **58.0** | 1 Lyme endemic area | 1988 | 6 (spring-autumn) | 178 | 20 |  | 462 | *I. ricinus* |  | *Erithacus rubecula*  *Turdus philomelos*  *Turdus merula* | Humair et al., 1993 |

N/A = Not available (no data on birds ringing without ticks)