**Supplementary Table S1.** Prevalence (%) and mean abundance (MA, range) of 11 ixodid tick species collected from helmeted guineafowl, scrub hares and greater kudus in the Andries Vosloo Kudu Reserve, South Africa

|  |  |  |  |
| --- | --- | --- | --- |
| Prevalence/MA (range) | | | |
| Tick species | Guineafowl | Scrub hares | Kudus |
|  | (n = 58) | (n = 42) | (n = 16) |
| Adult ticks |  |  |  |
| *Amblyomma hebraeum* | - | - | 75.0/44.75 (0–304) |
| *Amblyomma marmoreum* | - | - | - |
| *Haemaphysalis silacea* | - | - | 100/114.06 (15–276) |
| *Hyalomma rufipes* | - | - | 6.3/0.19 (0–3) |
| *Rhipicephalus appendiculatus* | 1.7/0.02 (0–1) |  | 68.8/32.13 (0–198) |
| *Rhipicephalus decoloratus* | - | - | 31.3/3.38 (0–32) |
| *Rhipicephalus evertsi evertsi* | - | - | 56.3/1.75 (0–10) |
| *Rhipicephalus exophthalmos* | - | 7.1/0.45 (0–15) | 81.3/6.06 (0–47) |
| *Rhipicephalus glabroscutatus* | - | - | 100/99.19 (6–362) |
| *Rhipicephalus oculatus* | - | 40.5/4.43 (0–30) | - |
| *Rhipicephalus simus* | - | - | 12.5/0.38 (0–4) |
| Total number of adultsa | 1 | 205 | 4894 |
| MA of adultsa | 0.02 (0–1) | 4.88 (0–45) | 305.88 (78–725) |
| Immature ticks |  |  |  |
| *Amblyomma hebraeum* | 100/525.17 (3–1792) | 100/61.45 (1–466) | 100/1078.38 (171–3294) |
| *Amblyomma marmoreum* | 75.9/10.45 (0–86) | 26.2/1.67 (0–31) | 68.8/132.00 (0–1008) |
| *Haemaphysalis silacea* | 87.9/123.83 (0–2368) | 42.9/1.86 (0–15) | 100/769.50 (6–2089) |
| *Hyalomma rufipes* | 53.4/2.55 (0–16) | 66.7/16.52 (0–105) | - |
| *Rhipicephalus appendiculatus* | 10.3/0.14 (0–3) | 73.8/18.71 (0–161) | 93.8/322.88 (0–2978) |
| *Rhipicephalus decoloratus* | 1.7/0.03 (0–2) | - | 12.5/2.75 (0–31) |
| *Rhipicephalus evertsi evertsi* | 3.4/0.05 (0–2) | 85.7/16.76 (0–100) | 93.8/27.56 (0–129) |
| *Rhipicephalus exophthalmos* | 1.7/0.02 (0–1) | 19.0/0.71 (0–9) | - |
| *Rhipicephalus glabroscutatus* | 8.6/0.26 (0–10) | 50.0/29.36 (0–296) | 81.3/1281.56 (0–3771) |
| *Rhipicephalus oculatus* | - | 76.2/48.40 (0–523) | - |
| *Rhipicephalus simus* | - | 14.3/0.38 (0–6) | - |
| Total number of immaturesa | 38427 | 8231 | 57848 |

aBased on all tick species infesting the host species, including those not listed here.

**Supplementary Table S2.** Prevalence (%) and mean abundance (MA, range) of 11 ixodid tick species collected from helmeted guineafowl, scrub hares, greater kudus, cattle, Dorper sheep, Angora goats and Angora goat kids on the farm Bucklands, South Africa

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Prevalence %/MA (range) | | | | | | | |
| Tick species | Guineafowl | Scrub hares | Kudus | Calves | Dorper sheep | Angora goats | Angora goats kids |
|  | (n = 37) | (n = 45) | (n = 9) | (n = 46) | (n = 48) | (n = 48) | (n = 52) |
| Adult ticks |  |  |  |  |  |  |  |
| *Amblyomma hebraeum* | - | - | 33.3/2.00 (0–10) | 73.9/23.74 (0–130) | 4.2/0.38 (0–14) | 4.2/0.33 (0–12) | 3.8/0.06 (0–2) |
| *Amblyomma marmoreum* | - | - | - | - | - | - | - |
| *Haemaphysalis silacea* | - | 2.2/0.04 (0–2) | 100/58.00 (10–161) | 95.7/22.33 (0–84) | 31.3/1.04 (0–12) | 35.4/1.02 (0–8) | 32.7/1.12 (0–8) |
| *Hyalomma rufipes* | - | - | 11.1/0.22 (0–2) | 21.7/0.80 (0–8) | 2.1/0.04 (0–2) | 2.1/0.02 (0–1) | - |
| *Rhipicephalus appendiculatus* | - | - | 100/10.00 (2–34) | 43.5/27.04 (0–409) | 6.3/0.13 (0–2) | 25.0/1.25 (0–12) | 19.2/1.15 (0–16) |
| *Rhipicephalus decoloratus* | - | - | 22.2/2.78 (0–16) | 34.8/3.91 (0–78) | - | 6.3/0.13 (0–2) | 11.5/0.19 (0–3) |
| *Rhipicephalus evertsi evertsi* | - | - | 44.4/2.33 (0–10) | 37.0/1.61 (0–18) | 8.3/0.25 (0–6) | 8.3/0.10 (0–2) | 5.8/0.13 (0–4) |
| *Rhipicephalus exophthalmos* | - | 15.6/0.29 (0–3) | 66.7/4.78 (0–17) | 41.3/6.48 (0–100) | 2.1/0.04 (0–2) | 6.3/0.17 (0–4) | - |
| *Rhipicephalus glabroscutatus* | - | - | 100/90.67 (10–212) | 84.8/37.50 (0–148) | 43.8/3.50 (0–32) | 64.6/7.85 (0–53) | 42.3/5.19 (0–56) |
| *Rhipicephalus oculatus* | - | 66.7/4.24 (0–39) | - | - | - | - | - |
| *Rhipicephalus simus* | - | - | - | 32.6/1.04 (0–11) | 2.1/0.08 (0–4) | 2.1/0.04 (0–2) | 5.8/0.15 (0–4) |
| Total number of adultsa | - | 206 | 1537 | 5725 | 262 | 524 | 416 |
| MA of adultsa | - | 4.58 (0–39) | 170.78 (55–407) | 124.46 (2–775) | 5.46 (0–48) | 10.92 (0–58) | 8.00 (0–58) |
| Immature ticks |  |  |  |  |  |  |  |
| *Amblyomma hebraeum* | 67.6/18.68 (0–243) | 26.7/0.80 (0–18) | 77.8/20.11 (0–65) | 91.3/154.89 (0–2293) | 43.8/4.38 (0–44) | 52.1/4.92 (0–84) | 36.5/1.40 (0–16) |
| *Amblyomma marmoreum* | 78.4/12.97 (0–134) | 22.2/2.69 (0–54) | 55.6/6.22 (0–32) | 63.0/39.33 (0–473) | 47.9/8.42 (0–140) | 54.2/11.40 (0–115) | 46.2/2.42 (0–32) |
| *Haemaphysalis silacea* | 94.6/51.11 (0–491) | 33.3/0.98 (0–12) | 100/308.56 (28–1762) | 100/460.57 (0–4993) | 83.3/56.88 (0–664) | 83.3/32.33 (0–204) | 86.5/37.29 (0–244) |
| *Hyalomma rufipes* | 32.4/1.46 (0–15) | 22.2/5.11 (0–109) | - | - | - | - | - |
| *Rhipicephalus appendiculatus* | 5.4/0.05 (0–1) | 57.8/16.73 (0–391) | 88.9/270.56 (0–2076) | 89.1/254.11 (0–3420) | 62.5/107.17 (0–1636) | 66.7/40.75 (0–454) | 71.2/70.60 (0–553) |
| *Rhipicephalus decoloratus* | - | 4.4/0.16 (0–6) | 22.2/8.56 (0–73) | 21.7/8.17 (0–120) | 4.2/0.13 (0–4) | 6.3/0.46 (0–16) | 34.6/1.75 (0–17) |
| *Rhipicephalus evertsi evertsi* | 2.7/0.11 (0–4) | 53.3/9.04 (0–154) | 77.8/24.78 (0–80) | 65.2/49.35 (0–592) | 41.7/3.00 (0–30) | 33.3/3.46 (0–57) | 17.3/0.50 (0–4) |
| *Rhipicephalus exophthalmos* | 10.8/0.19 (0–4) | 11.1/0.36 (0–7) | - | - | - | - | - |
| *Rhipicephalus glabroscutatus* | 5.4/0.16 (0–5) | 62.2/60.69 (0–597) | 88.9/1936.78 (0–6127) | 84.8/453.54 (0–4888) | 81.3/71.17 (0–640) | 66.7/56.08 (0–568) | 69.2/24.77 (0–205) |
| *Rhipicephalus oculatus* | - | 82.2 165.44 (0–2190) | - | - | - | - | - |
| *Rhipicephalus simus* | - | - | - | - | - | - | - |
| Total number of immaturesa | 3137 | 11796 | 23180 | 65318 | 12054 | 7177 | 7291 |

aBased on all tick species infesting the host species, including those not listed here