|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Epidemiology and Infection | | | | | | |
| Transmission dynamics of lumpy skin disease in Ethiopia | | | | | | |
| W. Molla, K. Frankena, M.C.M. de Jong | | | | | | |
| Supplementary material | | | | | | |
| Supplementary Table S1: Number of newly infected (C), infectious (I), susceptible (S) animals, contribution of the environment to the transmission (E) and total number of animals (N) of the epidemic during the 2014 LSD outbreak in Mota area. | | | | | | |
|  |  |  |  |  |  |  |
| Period | Date of infection | S | I | E | C | N |
| 1 | 29-4-2014 | 12508 | 1 | 0 | 0 | 12509 |
| 1 | 30-4-2014 | 12508 | 1 | 0.325 | 0 | 12509 |
| 1 | 1-5-2014 | 12508 | 1 | 0.430625 | 0 | 12509 |
| 1 | 2-5-2014 | 12508 | 1 | 0.464953125 | 0 | 12509 |
| 1 | 3-5-2014 | 12508 | 1 | 0.476109766 | 0 | 12509 |
| 1 | 4-5-2014 | 12508 | 1 | 0.479735674 | 1 | 12509 |
| 1 | 5-5-2014 | 12507 | 2 | 0.480914094 | 0 | 12509 |
| 1 | 6-5-2014 | 12507 | 2 | 0.806297081 | 0 | 12509 |
| 1 | 7-5-2014 | 12507 | 2 | 0.912046551 | 0 | 12509 |
| 1 | 8-5-2014 | 12507 | 2 | 0.946415129 | 0 | 12509 |
| 1 | 9-5-2014 | 12507 | 1 | 0.957584917 | 0 | 12509 |
| 1 | 10-5-2014 | 12507 | 1 | 0.636215098 | 1 | 12509 |
| 1 | 11-5-2014 | 12506 | 2 | 0.531769907 | 0 | 12509 |
| 1 | 12-5-2014 | 12506 | 2 | 0.82282522 | 1 | 12509 |
| 1 | 13-5-2014 | 12505 | 3 | 0.917418196 | 0 | 12509 |
| 1 | 14-5-2014 | 12505 | 3 | 1.273160914 | 0 | 12509 |
| 1 | 15-5-2014 | 12505 | 2 | 1.388777297 | 1 | 12509 |
| 1 | 16-5-2014 | 12504 | 3 | 1.101352622 | 0 | 12509 |
| 1 | 17-5-2014 | 12504 | 3 | 1.332939602 | 0 | 12509 |
| 1 | 18-5-2014 | 12504 | 3 | 1.408205371 | 0 | 12509 |
| 1 | 19-5-2014 | 12504 | 3 | 1.432666745 | 1 | 12508 |
| 1 | 20-5-2014 | 12503 | 4 | 1.440616692 | 0 | 12508 |
| 1 | 21-5-2014 | 12503 | 3 | 1.768200425 | 1 | 12508 |
| 1 | 22-5-2014 | 12502 | 4 | 1.549665138 | 0 | 12508 |
| 1 | 23-5-2014 | 12502 | 3 | 1.80364117 | 1 | 12507 |
| 1 | 24-5-2014 | 12501 | 4 | 1.56118338 | 1 | 12507 |
| 1 | 25-5-2014 | 12500 | 5 | 1.807384599 | 1 | 12507 |
| 1 | 26-5-2014 | 12499 | 5 | 2.212399995 | 0 | 12507 |
| 1 | 27-5-2014 | 12499 | 5 | 2.344029998 | 0 | 12507 |
| 1 | 28-5-2014 | 12499 | 5 | 2.386809749 | 0 | 12507 |
| 1 | 29-5-2014 | 12499 | 5 | 2.400713169 | 1 | 12507 |
| 1 | 30-5-2014 | 12498 | 5 | 2.40523178 | 1 | 12507 |
| 1 | 31-5-2014 | 12497 | 6 | 2.406700328 | 0 | 12507 |
| 1 | 1-6-2014 | 12497 | 5 | 2.732177607 | 0 | 12507 |
| 2 | 2-6-2014 | 12497 | 5 | 2.512957722 | 0 | 12507 |
| 2 | 3-6-2014 | 12497 | 4 | 2.44171126 | 0 | 12507 |
| 2 | 4-6-2014 | 12497 | 3 | 2.093556159 | 1 | 12507 |
| 2 | 5-6-2014 | 12496 | 3 | 1.655405752 | 0 | 12507 |
| 2 | 6-6-2014 | 12496 | 3 | 1.513006869 | 1 | 12507 |
| 2 | 7-6-2014 | 12495 | 4 | 1.466727233 | 0 | 12507 |
| 2 | 8-6-2014 | 12495 | 4 | 1.776686351 | 0 | 12507 |
| 2 | 9-6-2014 | 12495 | 3 | 1.877423064 | 0 | 12507 |
| 2 | 10-6-2014 | 12495 | 2 | 1.585162496 | 0 | 12507 |
| 2 | 11-6-2014 | 12495 | 2 | 1.165177811 | 1 | 12507 |
| 2 | 12-6-2014 | 12494 | 3 | 1.028682789 | 1 | 12507 |
| 2 | 13-6-2014 | 12493 | 4 | 1.309321906 | 1 | 12507 |
| 2 | 14-6-2014 | 12492 | 5 | 1.72552962 | 1 | 12506 |
| 2 | 15-6-2014 | 12491 | 5 | 2.185797126 | 0 | 12506 |
| 2 | 16-6-2014 | 12491 | 5 | 2.335384066 | 1 | 12506 |
| 2 | 17-6-2014 | 12490 | 5 | 2.383999821 | 2 | 12506 |
| 2 | 18-6-2014 | 12488 | 7 | 2.399799942 | 2 | 12506 |
| 2 | 19-6-2014 | 12486 | 9 | 3.054934981 | 0 | 12506 |
| 2 | 20-6-2014 | 12486 | 9 | 3.917853869 | 0 | 12506 |
| 2 | 21-6-2014 | 12486 | 9 | 4.198302507 | 2 | 12506 |
| 2 | 22-6-2014 | 12484 | 10 | 4.289448315 | 3 | 12506 |
| 2 | 23-6-2014 | 12481 | 12 | 4.644070702 | 0 | 12505 |
| 2 | 24-6-2014 | 12481 | 11 | 5.409322978 | 0 | 12505 |
| 2 | 25-6-2014 | 12481 | 10 | 5.333029968 | 4 | 12505 |
| 2 | 26-6-2014 | 12477 | 13 | 4.98323474 | 0 | 12505 |
| 2 | 27-6-2014 | 12477 | 12 | 5.84455129 | 5 | 12505 |
| 2 | 28-6-2014 | 12472 | 15 | 5.799479169 | 1 | 12505 |
| 2 | 29-6-2014 | 12471 | 14 | 6.75983073 | 0 | 12505 |
| 2 | 30-6-2014 | 12471 | 14 | 6.746944987 | 2 | 12505 |
| 2 | 1-7-2014 | 12469 | 16 | 6.742757121 | 1 | 12505 |
| 2 | 2-7-2014 | 12468 | 15 | 7.391396064 | 0 | 12505 |
| 2 | 3-7-2014 | 12468 | 13 | 7.277203721 | 6 | 12505 |
| 2 | 4-7-2014 | 12462 | 19 | 6.590091209 | 6 | 12505 |
| 2 | 5-7-2014 | 12456 | 25 | 8.316779643 | 3 | 12505 |
| 2 | 6-7-2014 | 12453 | 24 | 10.82795338 | 5 | 12505 |
| 2 | 7-7-2014 | 12448 | 29 | 11.31908485 | 3 | 12504 |
| 2 | 8-7-2014 | 12445 | 27 | 13.10370258 | 8 | 12504 |
| 2 | 9-7-2014 | 12437 | 34 | 13.03370334 | 6 | 12504 |
| 2 | 10-7-2014 | 12431 | 40 | 15.28595358 | 4 | 12504 |
| 2 | 11-7-2014 | 12427 | 42 | 17.96793491 | 8 | 12504 |
| 2 | 12-7-2014 | 12419 | 49 | 19.48957885 | 3 | 12504 |
| 2 | 13-7-2014 | 12416 | 52 | 22.25911313 | 2 | 12503 |
| 2 | 14-7-2014 | 12414 | 48 | 24.13421177 | 6 | 12503 |
| 2 | 15-7-2014 | 12408 | 48 | 23.44361882 | 4 | 12503 |
| 2 | 16-7-2014 | 12404 | 49 | 23.21917612 | 5 | 12503 |
| 2 | 17-7-2014 | 12399 | 49 | 23.47123224 | 1 | 12502 |
| 2 | 18-7-2014 | 12398 | 47 | 23.55315048 | 14 | 12502 |
| 2 | 19-7-2014 | 12384 | 53 | 22.92977391 | 9 | 12502 |
| 2 | 20-7-2014 | 12375 | 56 | 24.67717652 | 3 | 12502 |
| 2 | 21-7-2014 | 12372 | 55 | 26.22008237 | 5 | 12502 |
| 2 | 22-7-2014 | 12367 | 52 | 26.39652677 | 12 | 12501 |
| 2 | 23-7-2014 | 12355 | 61 | 25.4788712 | 8 | 12501 |
| 2 | 24-7-2014 | 12347 | 67 | 28.10563314 | 11 | 12501 |
| 2 | 25-7-2014 | 12336 | 72 | 30.90933077 | 5 | 12500 |
| 2 | 26-7-2014 | 12331 | 73 | 33.4455325 | 11 | 12500 |
| 2 | 27-7-2014 | 12320 | 78 | 34.59479806 | 12 | 12499 |
| 2 | 28-7-2014 | 12308 | 89 | 36.59330937 | 6 | 12498 |
| 2 | 29-7-2014 | 12302 | 82 | 40.81782555 | 4 | 12498 |
| 2 | 30-7-2014 | 12298 | 77 | 39.9157933 | 6 | 12497 |
| 2 | 31-7-2014 | 12292 | 79 | 37.99763282 | 6 | 12497 |
| 2 | 1-8-2014 | 12286 | 80 | 38.02423067 | 4 | 12497 |
| 2 | 2-8-2014 | 12282 | 72 | 38.35787497 | 10 | 12496 |
| 2 | 3-8-2014 | 12272 | 74 | 35.86630936 | 7 | 12495 |
| 2 | 4-8-2014 | 12265 | 70 | 35.70655054 | 6 | 12495 |
| 2 | 5-8-2014 | 12259 | 71 | 34.35462893 | 9 | 12495 |
| 2 | 6-8-2014 | 12250 | 69 | 34.2402544 | 10 | 12494 |
| 2 | 7-8-2014 | 12240 | 68 | 33.55308268 | 12 | 12492 |
| 2 | 8-8-2014 | 12228 | 74 | 33.00475187 | 12 | 12492 |
| 2 | 9-8-2014 | 12216 | 82 | 34.77654436 | 6 | 12492 |
| 2 | 10-8-2014 | 12210 | 82 | 37.95237692 | 15 | 12492 |
| 2 | 11-8-2014 | 12195 | 91 | 38.9845225 | 6 | 12491 |
| 2 | 12-8-2014 | 12189 | 93 | 42.24496981 | 10 | 12490 |
| 2 | 13-8-2014 | 12179 | 92 | 43.95461519 | 10 | 12489 |
| 2 | 14-8-2014 | 12169 | 96 | 44.18524994 | 7 | 12489 |
| 2 | 15-8-2014 | 12162 | 96 | 45.56020623 | 16 | 12488 |
| 2 | 16-8-2014 | 12146 | 103 | 46.00706702 | 14 | 12487 |
| 2 | 17-8-2014 | 12132 | 107 | 48.42729678 | 10 | 12487 |
| 2 | 18-8-2014 | 12122 | 104 | 50.51387145 | 4 | 12484 |
| 2 | 19-8-2014 | 12118 | 96 | 50.21700822 | 6 | 12484 |
| 2 | 20-8-2014 | 12112 | 95 | 47.52052767 | 15 | 12483 |
| 2 | 21-8-2014 | 12097 | 95 | 46.31917149 | 14 | 12482 |
| 2 | 22-8-2014 | 12083 | 101 | 45.92873074 | 22 | 12479 |
| 2 | 23-8-2014 | 12061 | 115 | 47.75183749 | 13 | 12478 |
| 2 | 24-8-2014 | 12048 | 118 | 52.89434718 | 5 | 12478 |
| 2 | 25-8-2014 | 12043 | 117 | 55.54066283 | 6 | 12476 |
| 2 | 26-8-2014 | 12037 | 107 | 56.07571542 | 14 | 12474 |
| 2 | 27-8-2014 | 12023 | 108 | 52.99960751 | 8 | 12473 |
| 2 | 28-8-2014 | 12015 | 106 | 52.32487244 | 14 | 12473 |
| 2 | 29-8-2014 | 12001 | 117 | 51.45558354 | 9 | 12472 |
| 2 | 30-8-2014 | 11992 | 120 | 54.74806465 | 5 | 12472 |
| 2 | 31-8-2014 | 11987 | 110 | 56.79312101 | 10 | 12472 |
| 2 | 1-9-2014 | 11977 | 106 | 54.20776433 | 13 | 12472 |
| 2 | 2-9-2014 | 11964 | 97 | 52.06752341 | 9 | 12472 |
| 2 | 3-9-2014 | 11955 | 93 | 48.44694511 | 12 | 12471 |
| 2 | 4-9-2014 | 11943 | 100 | 45.97025716 | 9 | 12471 |
| 2 | 5-9-2014 | 11934 | 103 | 47.44033358 | 10 | 12471 |
| 2 | 6-9-2014 | 11924 | 99 | 48.89310841 | 6 | 12471 |
| 2 | 7-9-2014 | 11918 | 97 | 48.06526023 | 8 | 12471 |
| 2 | 8-9-2014 | 11910 | 91 | 47.14620958 | 5 | 12469 |
| 2 | 9-9-2014 | 11905 | 87 | 44.89751811 | 9 | 12469 |
| 2 | 10-9-2014 | 11896 | 91 | 42.86669339 | 13 | 12469 |
| 2 | 11-9-2014 | 11883 | 94 | 43.50667535 | 13 | 12469 |
| 2 | 12-9-2014 | 11870 | 94 | 44.68966949 | 11 | 12469 |
| 2 | 13-9-2014 | 11859 | 96 | 45.07414258 | 5 | 12468 |
| 2 | 14-9-2014 | 11854 | 89 | 45.84909634 | 34 | 12468 |
| 2 | 15-9-2014 | 11820 | 113 | 43.82595631 | 7 | 12466 |
| 2 | 16-9-2014 | 11813 | 111 | 50.9684358 | 19 | 12465 |
| 2 | 17-9-2014 | 11794 | 123 | 52.63974164 | 15 | 12463 |
| 2 | 18-9-2014 | 11779 | 130 | 57.08291603 | 11 | 12462 |
| 2 | 19-9-2014 | 11768 | 136 | 60.80194771 | 16 | 12462 |
| 2 | 20-9-2014 | 11752 | 142 | 63.96063301 | 4 | 12461 |
| 2 | 21-9-2014 | 11748 | 133 | 66.93720573 | 28 | 12460 |
| 2 | 22-9-2014 | 11720 | 148 | 64.97959186 | 18 | 12458 |
| 2 | 23-9-2014 | 11702 | 155 | 69.21836735 | 9 | 12457 |
| 2 | 24-9-2014 | 11693 | 160 | 72.87096939 | 29 | 12456 |
| 2 | 25-9-2014 | 11664 | 154 | 75.68306505 | 28 | 12452 |
| 2 | 26-9-2014 | 11636 | 175 | 74.64699614 | 13 | 12451 |
| 2 | 27-9-2014 | 11623 | 170 | 81.13527375 | 13 | 12450 |
| 2 | 28-9-2014 | 11610 | 169 | 81.61896397 | 19 | 12448 |
| 3 | 29-9-2014 | 11591 | 177 | 81.45116329 | 12 | 12447 |
| 3 | 30-9-2014 | 11579 | 173 | 83.99662807 | 18 | 12446 |
| 3 | 1-10-2014 | 11561 | 187 | 83.52390412 | 12 | 12445 |
| 3 | 2-10-2014 | 11549 | 170 | 87.92026884 | 12 | 12444 |
| 3 | 3-10-2014 | 11537 | 162 | 83.82408737 | 14 | 12443 |
| 3 | 4-10-2014 | 11523 | 166 | 79.8928284 | 9 | 12442 |
| 3 | 5-10-2014 | 11514 | 148 | 79.91516923 | 13 | 12442 |
| 3 | 6-10-2014 | 11501 | 133 | 74.07243 | 18 | 12442 |
| 3 | 7-10-2014 | 11483 | 138 | 67.29853975 | 24 | 12442 |
| 3 | 8-10-2014 | 11459 | 149 | 66.72202542 | 22 | 12441 |
| 3 | 9-10-2014 | 11437 | 154 | 70.10965826 | 9 | 12439 |
| 3 | 10-10-2014 | 11428 | 151 | 72.83563893 | 6 | 12439 |
| 3 | 11-10-2014 | 11422 | 139 | 72.74658265 | 7 | 12439 |
| 3 | 12-10-2014 | 11415 | 134 | 68.81763936 | 9 | 12439 |
| 3 | 13-10-2014 | 11406 | 131 | 65.91573279 | 3 | 12439 |
| 3 | 14-10-2014 | 11403 | 120 | 63.99761316 | 15 | 12439 |
| 3 | 15-10-2014 | 11388 | 126 | 59.79922428 | 6 | 12438 |
| 3 | 16-10-2014 | 11382 | 119 | 60.38474789 | 5 | 12438 |
| 3 | 17-10-2014 | 11377 | 106 | 58.30004306 | 1 | 12438 |
| 3 | 18-10-2014 | 11376 | 83 | 53.397514 | 2 | 12438 |
| 3 | 19-10-2014 | 11374 | 62 | 44.32919205 | 5 | 12437 |
| 3 | 20-10-2014 | 11369 | 58 | 34.55698742 | 0 | 12437 |
| 3 | 21-10-2014 | 11369 | 52 | 30.08102091 | 13 | 12437 |
| 3 | 22-10-2014 | 11356 | 57 | 26.6763318 | 8 | 12435 |
| 3 | 23-10-2014 | 11348 | 56 | 27.19480783 | 4 | 12435 |
| 3 | 24-10-2014 | 11344 | 57 | 27.03831255 | 8 | 12435 |
| 3 | 25-10-2014 | 11336 | 51 | 27.31245158 | 18 | 12435 |
| 3 | 26-10-2014 | 11318 | 63 | 25.45154676 | 2 | 12434 |
| 3 | 27-10-2014 | 11316 | 59 | 28.7467527 | 3 | 12433 |
| 3 | 28-10-2014 | 11313 | 61 | 28.51769463 | 12 | 12432 |
| 3 | 29-10-2014 | 11301 | 71 | 29.09325075 | 8 | 12432 |
| 3 | 30-10-2014 | 11293 | 74 | 32.53030649 | 6 | 12432 |
| 3 | 31-10-2014 | 11287 | 80 | 34.62234961 | 9 | 12432 |
| 3 | 1-11-2014 | 11278 | 76 | 37.25226362 | 7 | 12432 |
| 3 | 2-11-2014 | 11271 | 76 | 36.80698568 | 3 | 12432 |
| 3 | 3-11-2014 | 11268 | 75 | 36.66227035 | 2 | 12432 |
| 3 | 4-11-2014 | 11266 | 70 | 36.29023786 | 4 | 12432 |
| 3 | 5-11-2014 | 11262 | 56 | 34.54432731 | 9 | 12432 |
| 3 | 6-11-2014 | 11253 | 63 | 29.42690637 | 5 | 12432 |
| 3 | 7-11-2014 | 11248 | 65 | 30.03874457 | 4 | 12432 |
| 3 | 8-11-2014 | 11244 | 57 | 30.88759199 | 0 | 12432 |
| 3 | 9-11-2014 | 11244 | 49 | 28.5634674 | 1 | 12432 |
| 3 | 10-11-2014 | 11243 | 44 | 25.2081269 | 0 | 12432 |
| 3 | 11-11-2014 | 11243 | 35 | 22.49264124 | 0 | 12432 |
| 3 | 12-11-2014 | 11243 | 28 | 18.6851084 | 0 | 12432 |
| 3 | 13-11-2014 | 11243 | 25 | 15.17266023 | 0 | 12432 |
| 3 | 14-11-2014 | 11243 | 23 | 13.05611458 | 0 | 12432 |
| 3 | 15-11-2014 | 11243 | 19 | 11.71823724 | 0 | 12432 |
| 3 | 16-11-2014 | 11243 | 10 | 9.983427102 | 0 | 12432 |
| 3 | 17-11-2014 | 11243 | 5 | 6.494613808 | 0 | 12432 |
| 3 | 18-11-2014 | 11243 | 1 | 3.735749488 | 0 | 12432 |
| 3 | 19-11-2014 | 11243 | 1 | 1.539118583 | 0 | 12432 |