**Table S3.** Number of larvae/pupae and generation of *Lobesia botrana* (Lb), parasitism rates, parasitoid richness (S), and abundance (N) of taxa identified in each vineyard by generation and year (\*data not considered for analysis of parasitism rate).

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Study site (vineyard) | Wine farm | Year | Number of larvae/pupae collected | Generation Lb | % Parasitism | S | *Campoplex capitator* | *Itoplectis maculator* | Cryptinae | *Elachertus affinis* | *Baryscapus sp.* | *Eulophinae* | *Elasmus bistrigatus* | *Elasmus steffani* | *Elasmus sp* | *Brachymeria tibialis* | *Hockeria sp.* | *Ascogaster quadridentata* | *Dybrachys cavus* | *Gonyozus gallicola* | *Gonyozus claripennis* | *Eurystaea scutellaris* | Not identified | N |
|
| 6 | B | 2002 | 109 | 1 | 10.1 | 4 | 6 |  |  | 1 |  |  |  |  |  | 3 |  | 1 |  |  |  |  |  | 11 |
| 21 | G | 2002 | 158 | 1 | 12.7 | 2 | 11 |  |  | 9 |  |  |  |  |  |  |  |  |  |  |  |  |  | 20 |
| 21 | G | 2004 | 99 | 1 | 45.5 | 4 | 1 |  |  | 35 |  |  |  |  |  |  |  |  |  |  | 1 |  | 8 | 45 |
| 15 | E | 2005 | 155 | 1 | 5.2 | 3 | 2 |  |  | 4 |  |  |  |  |  |  |  |  |  |  |  |  | 2 | 8 |
| 37 | I | 2005 | 98 | 1 | 2 | 1 | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |
| 21 | G | 2007 | 32 | 1 | 46.9 | 1 | 15 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 15 |
| 22 | G | 2009 | 37 | 1 | 10.8 | 3 | 1 |  |  |  |  |  |  |  |  |  |  | 2 |  |  |  |  | 1 | 4 |
| 40 | J | 2009 | 38 | 1 | 2.6 | 1 |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  |  |  |  | 1 |
| 1 | A | 2011 | 13 | 1 | 61.5 | 1 |  |  |  | 8 |  |  |  |  |  |  |  |  |  |  |  |  |  | 8 |
| 2 | A | 2011 | 6 | 1 | \* | 1 |  |  |  | 4 |  |  |  |  |  |  |  |  |  |  |  |  |  | 4 |
| 3 | A | 2011 | 4 | 1 | \* | 1 |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| 7 | C | 2011 | 98 | 1 | 3.1 | 1 |  |  |  | 3 |  |  |  |  |  |  |  |  |  |  |  |  |  | 3 |
| 8 | C | 2011 | 80 | 1 | 37.5 | 1 |  |  |  | 30 |  |  |  |  |  |  |  |  |  |  |  |  |  | 30 |
| 9 | C | 2011 | 25 | 1 | 40.0 | 1 |  |  |  | 10 |  |  |  |  |  |  |  |  |  |  |  |  |  | 10 |
| 14 | D | 2011 | 48 | 1 | 16.7 | 2 |  |  |  | 7 |  |  |  |  |  |  |  |  |  |  |  | 1 |  | 8 |
| 16 | F | 2011 | 99 | 1 | 1.0 | 1 |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  |  |  |  | 1 |
| 17 | F | 2011 | 68 | 1 | 5.9 | 2 | 1 |  |  |  |  |  |  |  |  |  |  | 3 |  |  |  |  |  | 4 |
| 18 | F | 2011 | 58 | 1 | 0.0 | 0 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0 |
| 21 | G | 2011 | 13 | 1 | 0 | 0 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0 |
| 22 | G | 2011 | 217 | 1 | 2.3 | 2 | 1 |  |  | 4 |  |  |  |  |  |  |  |  |  |  |  |  |  | 5 |
| 23 | G | 2011 | 14 | 1 | 7.1 | 1 |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| 24 | G | 2011 | 34 | 1 | 0 | 0 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0 |
| 37 | I | 2011 | 13 | 1 | 0 | 0 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0 |
| 38 | I | 2011 | 20 | 1 | 5 | 1 |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| 39 | I | 2011 | 20 | 1 | 0 | 0 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0 |
| 40 | J | 2011 | 22 | 1 | 40.9 | 2 |  |  |  | 7 |  |  |  |  |  |  |  |  |  |  |  |  | 2 | 9 |
| 41 | J | 2011 | 15 | 1 | 6.7 | 1 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| 40 | J | 2011 | 5 | 1 | \* | 1 |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| 40 | J | 2011 | 5 | 1 | \* | 1 |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| 21 | G | 2011 | 8 | 1 | \* | 2 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |
| 13 | C | 2012 | 3 | 1 | \* | 2 |  |  |  | 1 |  |  |  |  |  | 1 |  |  |  |  |  |  |  | 2 |
| 8 | C | 2012 | 237 | 1 | 54.4 | 5 | 4 | 1 |  | 122 |  | 1 | 1 |  |  |  |  |  |  |  |  |  |  | 129 |
| 9 | C | 2012 | 42 | 1 | 45.2 | 2 |  |  |  | 18 |  |  |  |  |  | 1 |  |  |  |  |  |  |  | 19 |
| 21 | G | 2012 | 5 | 1 | \* | 1 |  |  |  | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |
| 16 | F | 2012 | 1 | 1 | \* | 1 |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| 24 | G | 2012 | 3 | 1 | \* | 1 |  |  |  |  |  |  |  |  |  | 2 |  |  |  |  |  |  |  | 2 |
| 17 | F | 2012 | 12 | 1 | 0.0 | 0 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0 |
| 18 | F | 2012 | 11 | 1 | 9.1 | 1 |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| 9 | C | 2012 | 3 | 1 | \* | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0 |
| 7 | C | 2012 | 4 | 1 | \* | 1 |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| 16 | F | 2013 | 14 | 1 | 7.1 | 1 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| 22 | G | 2013 | 28 | 1 | 0 | 0 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0 |
| 42 | J | 2015 | 14 | 1 | 21.4 | 2 |  |  |  | 2 |  |  |  |  |  |  |  | 1 |  |  |  |  |  | 3 |
| 21 | G | 2015 | 5 | 1 | \* | 1 | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |
| 6 | B | 2002 | 125 | 2 | 36.8 | 4 |  |  |  | 1 |  |  |  |  |  | 41 |  |  | 3 | 1 |  |  |  | 46 |
| 21 | G | 2002 | 103 | 2 | 6.8 | 3 | 4 |  |  |  |  |  | 1 |  |  | 2 |  |  |  |  |  |  |  | 7 |
| 31 | H | 2005 | 89 | 2 | 24.7 | 9 | 5 |  | 2 | 3 |  |  |  |  | 1 | 1 | 1 |  | 1 |  |  | 1 | 7 | 22 |
| 31 | H | 2011 | 5 | 2 | \* | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 | 1 |
| 41 | J | 2011 | 5 | 2 | \* | 1 |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| 9 | C | 2011 | 73 | 2 | 11.0 | 3 | 1 |  |  | 5 |  |  |  |  |  | 2 |  |  |  |  |  |  |  | 8 |
| 14 | D | 2011 | 30 | 2 | 3.3 | 1 |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| 16 | F | 2011 | 55 | 2 | 1.8 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  | 1 |
| 17 | F | 2011 | 22 | 2 | 0.0 | 0 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0 |
| 18 | F | 2011 | 39 | 2 | 5.1 | 1 |  |  |  | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |
| 17 | F | 2011 | 4 | 2 | \* | 1 |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| 17 | F | 2011 | 5 | 2 | \* | 1 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| 22 | G | 2011 | 41 | 2 | 2.4 | 1 |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| 34 | H | 2011 | 44 | 2 | 13.6 | 3 |  |  |  | 3 |  |  |  |  |  | 1 |  |  | 2 |  |  |  |  | 6 |
| 35 | H | 2011 | 12 | 2 | 33.3 | 2 | 1 |  |  |  |  |  |  |  |  | 3 |  |  |  |  |  |  |  | 4 |
| 38 | I | 2011 | 23 | 2 | 0 | 0 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0 |
| 40 | J | 2011 | 64 | 2 | 10.9 | 4 |  |  |  | 2 |  |  |  |  |  | 1 |  |  | 3 |  |  |  | 1 | 7 |
| 2 | A | 2013 | 10 | 2 | 0.0 | 0 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0 |
| 11 | C | 2013 | 13 | 2 | 7.7 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 | 1 |
| 12 | C | 2013 | 32 | 2 | 3.1 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 | 1 |
| 16 | F | 2013 | 14 | 2 | 0.0 | 0 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0 |
| 22 | G | 2013 | 21 | 2 | 0 | 0 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0 |
| 22 | G | 2011 | 14 | 3 | 0 | 0 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0 |
| 23 | G | 2011 | 24 | 3 | 8.3 | 1 |  |  |  | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |
| 35 | H | 2011 | 33 | 3 | 12.1 | 3 |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  | 1 |  | 2 | 4 |
| 36 | H | 2011 | 10 | 3 | 0 | 0 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0 |
| 34 | H | 2011 | 8 | 3 | \* | 2 |  |  |  | 1 |  |  |  |  |  |  |  |  | 1 |  |  |  |  | 2 |
| 31 | H | 2011 | 8 | 3 | \* | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 | 1 |
| 40 | J | 2011 | 12 | 3 | 0 | 0 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0 |
| 23 | G | 2011 | 8 | 3 | 12.5 | 1 |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| 16 | F | 2012 | 21 | 3 | 0.0 | 0 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0 |
| 13 | C | 2012 | 3 | 3 | \* | 2 |  |  |  |  |  |  | 1 | 1 |  |  |  |  |  |  |  |  |  | 2 |
| 10 | C | 2012 | 3 | 3 | \* | 1 |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| 10 | C | 2012 | 1 | 3 | \* | 1 |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| 10 | C | 2012 | 2 | 3 | \* | 1 |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| 12 | C | 2013 | 19 | 3 | 0.0 | 0 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0 |
| 13 | C | 2013 | 26 | 3 | 0.0 | 0 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0 |
| 19 | F | 2013 | 13 | 3 | 0 | 0 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0 |
| 22 | G | 2013 | 14 | 3 | 0 | 0 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0 |