

```
% this is ../../crops/18r/planning/current pedigrees/primary dominants/les15-n2007- w23
% generated Friday, June 01, 2018 at 21:28:50 UTC (=1527888530.936186) by compute_pedigrees/1.
% Horizontal pedigrees, generations at same indentation. S: Mo20W; W: W23; M: M14.
% !!! => cross was not by Toni; references to image locations on right.
                                                                                      retween rows
% W23/Les15-N2007-
 06R0067:0000000 x 06R0067:0000000
      06R300:W00I0509 x 06R0067:0006711
      06R300:W00I8705 x 06R0067:0006711
           09R201:S0040305 x 09R1416:0025907
                                                             17R4419:0011113: [17r/qimmel/2.8-[351]]
               17R205:S0001311 x 17R4419:0011113
                17R205:S0001401 x 17R4419:0011112
                                                             17R4419:0011112: [17r/gimmel/2.8-[353]]
                17R205:S0001410 x 17R4419:0011113
                                                             17R4419:0011113: [17r/gimmel/2.8-[351]]
                17R205:S0001418 x 17R4419:0011112
                                                             17R4419:0011112: [17r/qimmel/2.8-[353]]
                17R205:S0001509 x 17R4419:0011112
                                                            17R4419:0011112: [17r/gimmel/2.8-[353]]
                17R205:S0001516 x 17R4419:0011113
                                                            17R4419:0011113: [17r/gimmel/2.8-[351]]
               17R205:S0001517 x 17R4419:0011112
                                                            17R4419:0011112: [17r/gimmel/2.8-[353]]
               17R205:S0003505 x 17R4419:0011108
               17R205:S0003513 x 17R4419:0011108
               17R205:S0003516 x 17R4419:0011108
           09R201:S0056209 x 09R1416:0025907
                10R205:S0002302 x 10R2252:0031702
                                                             10R2252:0031702: [10r/gimmel/14.8-[3]]
                    12R205:S0008815 x 12R3270:0014314
                    12R205:S0009104 x 12R3270:0014314
                    12R205:S0009109 x 12R3270:0014314
                    12R205:S0011203 x 12R3270:0014314
                10R205:S0002303 x 10R2252:0031708
                                                             10R2252:0031708: [10r/gimmel/14.8-[8]]
                17R205:S0001501 x 17R2252:0011014
                                                             17R2252:0011014: [17r/qimmel/2.8-[316]]
                17R205:S0001502 x 17R2252:0011020
                                                             17R2252:0011020: [17r/qimmel/2.8-[317]]
                17R205:S0001504 x 17R2252:0011014
                                                             17R2252:0011014: [17r/gimmel/2.8-[316]]
                17R205:S0001508 x 17R2252:0011014
                                                             17R2252:0011014: [17r/gimmel/2.8-[316]]
                                                             17R2252:0011014: [17r/qimmel/2.8-[316]]
                17R205:S0001510 x 17R2252:0011014
                                                             17R2252:0011020: [17r/gimmel/2.8-[317]]
                17R205:S0001511 x 17R2252:0011020
                17R205:S0001512 x 17R2252:0011020
                                                            17R2252:0011020: [17r/gimmel/2.8-[317]]
                                                             17R2252:0011020: [17r/gimmel/2.8-[317]]
                17R205:S0001513 x 17R2252:0011020
                17R205:S0003303 x 17R2252:0011001
                17R205:S0003407 x 17R2252:0011001
               17R205:S0003408 x 17R2252:0011001
               17R205:S0003411 x 17R2252:0011019
               17R205:S0003412 x 17R2252:0011019
               17R205:S0003510 x 17R2252:0011019
               17R205:S0003601 x 17R2252:0011002
                                                             17R2252:0011002: [17r/gimmel/2.8-[308]]
               17R205:S0003609 x 17R2252:0011002
                                                             17R2252:0011002: [17r/gimmel/2.8-[308]]
               17R205:S0003610 x 17R2252:0011012
                                                             17R2252:0011012: [17r/qimmel/2.8-[303]]
                                                             17R2252:0011012: [17r/gimmel/2.8-[303]]
               17R205:S0003612 x 17R2252:0011012
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les15-n2007- w23
                17R205:S0003615 x 17R2252:0011012
                                                              17R2252:0011012: [17r/qimmel/2.8-[303]]
                17R205:S0003702 x 17R2252:0011020
                                                              17R2252:0011020: [17r/gimmel/2.8-[317]]
                17R205:S0003717 x 17R2252:0011002
                                                              17R2252:0011002: [17r/gimmel/2.8-[308]]
           09R201:S0056212 x 09R1416:0025906
                10R205:S0000809 x 10R2251:0031606
                                                              10R2251:0031606: [10r/gimmel/14.8-[2]]
           09R301:W0052102 x 09R1416:0025907
           09R301:W0056313 x 09R1416:0025906
           09R301:W0056606 x 09R1416:0025906
           09R301:W0056617 x 09R1416:0025907
           09R401:M0040909 x 09R1416:0025906
                10R305:W0010502 x 10R2254:0032002
                                                              10R2254:0032002: [10r/gimmel/14.8-[23]]
                     11R305:W0052115 x 11R3271:0024506
                                                                   11R3271:0024506: [11r/aleph/19.8-[1123]]
                          12R305:W0009213 x 12R3456:0014504
                                                                        12R3456:0014504: [12r/aleph/8.8-[1905]]
                          12R305:W0011614 x 12R3456:0014501
                                                                        12R3456:0014501: [12r/aleph/8.8-[1903]]
                               12N305:W0042006 x 12N4053:0000301
                                    14R305:W0000703 x 14R4137:0004215
                                                                                  14R4137:0004215: [14r/bet/17.8-[2110]]
                                         17R205:S0003714 x 17R4548:0011508
                                                                                       17R4548:0011508: [17r/gimmel/2.8-[33
4]]
                                         17R205:S0003715 x 17R4548:0011508
                                                                                       17R4548:0011508: [17r/gimmel/2.8-[33
4]]
                                          17R305:W0003804 x 17R4548:0011515
                                         17R305:W0003806 x 17R4548:0011508
                                                                                       17R4548:0011508: [17r/gimmel/2.8-[33
4]]
                                         17R305:W0003808 x 17R4548:0011508
                                                                                       17R4548:0011508: [17r/gimmel/2.8-[33
4]]
                                         17R305:W0003814 x 17R4548:0011505
                                                                                       17R4548:0011505: [17r/gimmel/2.8-[33
6]]
                                                                              h
                                         17R305:W0004012 x 17R4548:0011508
                                                                                       17R4548:0011508: [17r/gimmel/2.8-[33
4]]
                                         17R305:W0004013 x 17R4548:0011508
                                                                                       17R4548:0011508: [17r/gimmel/2.8-[33
4]]
                                         17R305:W0004016 x 17R4548:0011508
                                                                                       17R4548:0011508: [17r/gimmel/2.8-[33
4]]
                                         17R305:W0004017 x 17R4548:0011505
                                                                                       17R4548:0011505: [17r/gimmel/2.8-[33
6]]
                                         17R405:M0004208 x 17R4548:0011508
                                                                                       17R4548:0011508: [17r/gimmel/2.8-[33
411
                                          17R405:M0004209 x 17R4548:0011508
                                                                                       17R4548:0011508: [17r/gimmel/2.8-[33
4]]
                                    14R305:W0000705 x 14R4137:0004215
                                                                                  14R4137:0004215: [14r/bet/17.8-[2110]]
                                    14R305:W0000716 x 14R4137:0004215
                                                                                  14R4137:0004215: [14r/bet/17.8-[2110]]
                               12N305:W0042007 x 12N4053:0000301
                10R405:M0000715 x 10R2254:0032002
                                                              10R2254:0032002: [10r/gimmel/14.8-[23]]
                     12R405:M0009302 x 12R3486:0014708
                                                                   12R3486:0014708: [12r/aleph/8.8-[1900]]
                     12R405:M0011707 x 12R3486:0014708
                                                                   12R3486:0014708: [12r/aleph/8.8-[1900]]
                10R405:M0001010 x 10R2254:0032002
                                                              10R2254:0032002: [10r/gimmel/14.8-[23]]
                     17R405:M0004205 x 17R4550:0012019
                                                                   17R4550:0012019: [17r/gimmel/2.8-[349]]
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les15-n2007- w23
                       Fri Jun 01 16:28:50 2018
                     17R405:M0004211 x 17R4550:0012019
                                                                  17R4550:0012019: [17r/gimmel/2.8-[349]]
                     17R405:M0004213 x 17R4550:0012019
                                                                  17R4550:0012019: [17r/gimmel/2.8-[349]]
                     17R405:M0004412 x 17R4550:0012019
                                                                  17R4550:0012019: [17r/gimmel/2.8-[349]]
                     17R405:M0004414 x 17R4550:0012019
                                                                  17R4550:0012019: [17r/gimmel/2.8-[349]]
                     17R405:M0004415 x 17R4550:0012019
                                                                  17R4550:0012019: [17r/gimmel/2.8-[349]]
                                                             10R2254:0032003: [10r/gimmel/14.8-[26]]
                10R405:M0006607 x 10R2254:0032003
                                                             10R2254:0032010: [10r/gimmel/14.8-[21]]
                10R405:M0006610 x 10R2254:0032010
                     17R405:M0004706 x 17R4552:0012208
                                                                  17R4552:0012208: [17r/gimmel/2.8-[342]]
                     17R405:M0004708 x 17R4552:0012208
                                                                  17R4552:0012208: [17r/gimmel/2.8-[342]]
                     17R405:M0004901 x 17R4552:0012208
                                                                  17R4552:0012208: [17r/gimmel/2.8-[342]]
                     17R405:M0004906 x 17R4552:0012206
                                                                  17R4552:0012206: [17r/gimmel/2.8-[340]]
                     17R405:M0004908 x 17R4552:0012206
                                                                  17R4552:0012206: [17r/gimmel/2.8-[340]]
                                                                  17R4552:0012206: [17r/gimmel/2.8-[340]]
                    17R405:M0004911 x 17R4552:0012206
           09R401:M0051104 x 09R1416:0025907
           09R401:M0056406 x 09R1416:0025906
           09R401:M0057004 x 09R1416:0025907
                                                             10R2255:0032106: [10r/gimmel/14.8-[27]]
                10R405:M0006612 x 10R2255:0032106
      06R400:M00I6505 x 06R0067:0006711
      06R400:M00I6512 x 06R0067:0006711
```