```
% this is ../../crops/18r/planning/current pedigrees/primary dominants/les7- mo20w
% generated Friday, June 01, 2018 at 21:28:50 UTC (=1527888530.718563) 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.
% Mo20W/Les7-
06R0005:0000000 x 06R0005:0000000
      06R0005:0000501 x 06R0005:0000506
     06R0005:0000504 x 06R0005:0000508
     06R0005:0000509 x 06R0005:0000509
      06R0005:0000510 x 06R0005:0000505
           06N201:S0005007 x 06N1237:0000602
           06N201:S0005301 x 06N1237:0000612
           06N201:S0005603 x 06N1237:0000605
           06N201:S0006809 x 06N1237:0000607
           06N201:S0011301 x 06N1237:0000611
           06N301:W0004805 x 06N1237:0000602
           06N301:W0004809 x 06N1237:0000611
           06N301:W0004810 x 06N1237:0000612
           06N401:M0006107 x 06N1237:0000602
      06R200:S00I1606 x 06R0005:0000509
           06N201:S0006803 x 06N1005:0003607
           06N201:S0025902 x 06N1005:0003602
           06N201:S0025905 x 06N1005:0003605
                07R201:S0085211 x 07R2429:0048315
                                                                  10R1645:0021805: [10r/gimmel/10.8-[178]]
                    10R205:S0001409 x 10R1645:0021805
                    10R205:S0002306 x 10R1645:0021804
                                                                  10R1645:0021804: [10r/gimmel/10.8-[177]]
                     10R205:S0002308 x 10R1645:0021806
                                                                  10R1645:0021806: [10r/gimmel/10.8-[179]]
                          11N205:S0035511 x 11N3226:0013712
                          11N205:S0036601 x 11N3226:0013704
                                                                    6
                               12N205:S0037302 x 12N3973:0021508
                               12N205:S0037303 x 12N3973:0021512
                               12N205:S0037911 x 12N3973:0021509
                                    13R4091:0007401 x 13R4091:0007403
                                                                                 13R4091:0007403: [13r/bet/1.8-[1765]]
                                    13R4091:0007403 x 13R4091:0007403
                                                                                 13R4091:0007403: [13r/bet/1.8-[1765]]
   13R4091:0007403: [13r/bet/1.8-[1765]]
                                    13R4091:0007405 x 13R4091:0007403
                                                                                 13R4091:0007405: [13r/bet/1.8-[1767]]
   13R4091:0007403: [13r/bet/1.8-[1765]]
                                    13R4091:0007406 x 13R4091:0007403
                                                                                 13R4091:0007403: [13r/bet/1.8-[1765]]
                                    13R4091:0007407 x 13R4091:0007412
                                    13R4091:0007411 x 13R4091:0007412
                                    13R4091:0007412 x 13R4091:0007412
                                    13R4091:0007415 x 13R4091:0007412
                                    13R504:B0003303 x 13R4091:0007412
                                    14R4091:0011801 x 14R4091:0011806
                                                                                 14R4091:0011806: [14r/bet/20.8-[2233]]
```

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14R4091:0011803 x 14R4091:0011806
                                                                                  14R4091:0011806: [14r/bet/20.8-[2233]]
                                    14R4091:0011804 x 14R4091:0011806
                                                                                  14R4091:0011806: [14r/bet/20.8-[2233]]
                                    14R4091:0011807 x 14R4091:0011806
                                                                                  14R4091:0011806: [14r/bet/20.8-[2233]]
                                    14R4091:0011809 x 14R4091:0011806
                                                                                  14R4091:0011806: [14r/bet/20.8-[2233]]
                          11N205:S0036602 x 11N3226:0013702
           06N201:S0025910 x 06N1005:0003612
           06N301:W0009602 x 06N1005:0003607
           06N301:W0031407 x 06N1005:0003607
                07R201:S0028208 x 07R2427:0048502
                                                             07R2427:0048502: [07r/gimmel/11.8-[76,77,78]]
                                                      !!!
                07R201:S0028906 x 07R2427:0048504
                                                      !!!
                                                             07R2427:0048504: [07r/gimmel/11.8-[79,80]]
                                                             07R2427:0048504: [07r/gimmel/11.8-[79,80]]
                07R301:W0033510 x 07R2427:0048504
                                                      !!!
                07R401:M0030603 x 07R2427:0048504
                                                              07R2427:0048504: [07r/gimmel/11.8-[79,80]]
                                                      111
                09R301:W0034708 x 09R2427:0019109
                09R301:W0034711 x 09R2427:0019104
                09R301:W0042810 x 09R2427:0019103
                                                             09R2427:0019103: [09r/gimmel/3.9-[95]]
                     10R305:W0001502 x 10R1035:0021906
                                                                   10R1035:0021906: [10r/gimmel/10.8-[184,185,187]]
                          11N305:W0030810 x 11N3192:0013803
                               16R305:W0001604 x 16R3607:0010408
                                                                             16R3607:0010408: [16r/qimmel/27.7-[159]]
                               16R305:W0001607 x 16R3607:0010403
                                                                             16R3607:0010403: [16r/gimmel/27.7-[160]]
                               16R305:W0001609 x 16R3607:0010402
                                                                             16R3607:0010402: [16r/gimmel/27.7-[144]]
                          11N305:W0038312 x 11N3192:0013805
                          11N305:W0039501 x 11N3192:0013810
                               13R305:W0000803 x 13R3974:0021303
                                   16R305:W0001603 x 16R4279:0010503
                                                                                  16R4279:0010503: [16r/gimmel/27.7-[155]]
                                    16R305:W0001610 x 16R4279:0010511
                                                                                  16R4279:0010511: [16r/gimmel/30.7-[283]]
                                    16R305:W0002913 x 16R4279:0010503
                                                                                  16R4279:0010503: [16r/gimmel/27.7-[155]]
                                    16R305:W0002914 x 16R4279:0010511
                                                                                  16R4279:0010511: [16r/gimmel/30.7-[283]]
                                   16R305:W0002915 x 16R4279:0010511
                                                                                  16R4279:0010511: [16r/gimmel/30.7-[283]]
                     10R305:W0001511 x 10R1035:0021903
                                                                   10R1035:0021903: [10r/gimmel/10.8-[182,183]]
      06R400:M00I1805 x 06R0005:0000509
           06N201:S0004709 x 06N1609:0020311
                07R201:S0119103 x 07R2413:0049402
                                                             07R2413:0049402: [07r/gimmel/11.8-[94,95,97]]
                07R201:S0119414 x 07R2413:0049401
                                                             07R2413:0049401: [07r/gimmel/11.8-[91,92,93]]
                07R301:W0120102 x 07R2413:0049402
                                                             07R2413:0049402: [07r/gimmel/11.8-[94,95,97]]
           06N201:S0010103 x 06N1609:0020301
                                                             07R2422:0048701: [07r/gimmel/11.8-[85,86,87]]
                07R201:S0032113 x 07R2422:0048701
                                                      !!!
                                                             07R2422:0048705: [07r/gimmel/11.8-[88,89,90]] 07R2422:0048705
                07R2422:0048705 x 07R2422:0048705
: [07r/qimmel/11.8-[88,89,90]]
                07R401:M0031201 x 07R2422:0048705
                                                      !!!
                                                             07R2422:0048705: [07r/gimmel/11.8-[88,89,90]]
           06N301:W0025707 x 06N1609:0020301
           06N301:W0025708 x 06N1609:0020307
           06N301:W0035005 x 06N1609:0020311
           06N401:M0005506 x 06N1609:0020311
                09R401:M0043210 x 09R2415:0019201
                                                              09R2415:0019201: [09r/bet/3.9-[32]]
                     10R405:M0002206 x 10R2241:0022010
                                                                   10R2241:0022010: [10r/gimmel/10.8-[193]]
                     10R405:M0007204 x 10R2241:0022011
                                                                   10R2241:0022011: [10r/gimmel/10.8-[194]]
                          11N405:M0036102 \times 11N3260:0013903
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12R3608:0025901 x 12R3608:0025901
                                                                             12R3608:0025901: [12r/bet/6.8-[85],12r/bet/8.8
-[174]] 12R3608:0025901: [12r/bet/6.8-[85],12r/bet/8.8-[174]]
                               12R405:M0000601 x 12R3608:0025901
                                                                             12R3608:0025901: [12r/bet/6.8-[85],12r/bet/8.8
-[174]]
                                    12N3975:0022001 x 12N3975:0022009
                                                                                  12N3975:0022001: [12n/bet/17.1-[943]]
                                    12N3975:0022003 x 12N3975:0022001
                                                                                  12N3975:0022001: [12n/bet/17.1-[943]]
                                         13R4196:0013005 x 13R4114:0012804
                                                                                       13R4114:0012804: [13r/bet/17.7-[1227
],13r/bet/21.7-[1431],13r/bet/25.7-[1583]]
                                         13R4196:0013007 x 13R4114:0012804
                                                                                       13R4114:0012804: [13r/bet/17.7-[1227
],13r/bet/21.7-[1431],13r/bet/25.7-[1583]]
                                         13R4196:0013016 x 13R4114:0012808
                                                                                       13R4114:0012808: [13r/bet/17.7-[1230]
],13r/bet/21.7-[1434],13r/bet/25.7-[1586]]
                                         13R4196:0013017 x 13R4114:0012805
                                                                                       13R4114:0012805: [13r/bet/17.7-[1228
],13r/bet/21.7-[1432],13r/bet/25.7-[1584],13r/bet/6.8-[1844,1845]]
                                         13R4196:0013018 x 13R4115:0012910
                                                                                       13R4196:0013018: [13r/bet/6.8-[1830]
         13R4115:0012910: [13r/bet/17.7-[1234],13r/bet/21.7-[1438],13r/bet/25.7-[1589],13r/bet/6.8-[1846]]
                                    12N3975:0022008 x 12N3975:0022006
                                    12N3975:0022009 x 12N3975:0022001
                                                                                  12N3975:0022001: [12n/bet/17.1-[943]]
                                    12N504:B0040506 x 12N3975:0022001
                                                                                  12N3975:0022001: [12n/bet/17.1-[943]]
                                    12N504:B0040508 x 12N3975:0022006
                                    12N504:B0040707 x 12N3975:0022010
                                    13R3975:0007505 x 13R3975:0007506
                                    13R3975:0007506 x 13R3975:0007506
                                    13R3975:0007507 x 13R3975:0007506
                                    13R3975:0007509 x 13R3975:0007512
                                                                                  13R3975:0007509: [13r/bet/1.8-[1753]]
   13R3975:0007512: [13r/bet/1.8-[1763]]
                                    13R3975:0007512 x 13R3975:0007512
                                                                                  13R3975:0007512: [13r/bet/1.8-[1763]]
   13R3975:0007512: [13r/bet/1.8-[1763]]
                                    13R3975:0007514 x 13R3975:0007512
                                                                                  13R3975:0007512: [13r/bet/1.8-[1763]]
                                    14R3975:0011901 x 14R3975:0011906
                                                                                  14R3975:0011906: [14r/bet/20.8-[2215]]
                                    14R3975:0011902 x 14R3975:0011906
                                                                                  14R3975:0011906: [14r/bet/20.8-[2215]]
                                    14R3975:0011905 x 14R3975:0011906
                                                                                  14R3975:0011906: [14r/bet/20.8-[2215]]
                                    14R3975:0011909 x 14R3975:0011906
                                                                                  14R3975:0011906: [14r/bet/20.8-[2215]]
                               12R503:B0012402 x 12R3608:0025901
                                                                             12R3608:0025901: [12r/bet/6.8-[85],12r/bet/8.8
-[174]]
                          11N405:M0036107 x 11N3260:0013901
                          11N405:M0036108 x 11N3260:0013906
                          11N405:M0039305 x 11N3260:0013906
                     10R405:M0007209 x 10R2241:0022008
                                                                   10R2241:0022008: [10r/gimmel/10.8-[192]]
                     10R405:M0007213 x 10R2241:0022001
                                                                   10R2241:0022001: [10r/gimmel/10.8-[191]]
                09R401:M0043211 x 09R2415:0019202
                                                             09R2415:0019202: [09r/bet/3.9-[26]]
                09R401:M0045401 \times 09R2415:0019201
                                                             09R2415:0019201: [09r/bet/3.9-[32]]
                09R401:M0045403 x 09R2415:0019202
                                                             09R2415:0019202: [09r/bet/3.9-[26]]
           06N401:M0007605 x 06N1609:0020301
           06N401:M0007903 x 06N1609:0020307
           06N401:M0007904 x 06N1609:0020302
           06N401:M0008807 \times 06N1609:0020305
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06N401:M0009102 x 06N1609:0020310 06N401:M0009401 x 06N1609:0020312 06N401:M0011808 x 06N1609:0020304