```
% this is ../../crops/18r/planning/current_pedigrees/primary recessives/les23- w23
% generated Friday, June 01, 2018 at 21:28:50 UTC (=1527888530.918251) 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.
% W23/les23-
 06R0035:0000000 x 06R0035:0000000
      06R0035:0003501 x 06R0035:0003503
      06R0035:0003502 x 06R0035:0003507
           07R1367:0077201 x 07R1367:0077201
      06R0035:0003505 x 06R0035:0003510
      06R0035:0003513 x 06R0035:0003514
           09R201:S0033105 x 09R1368:0007709
           09R201:S0033106 x 09R1368:0007703
                10R1008:0011702 x 10R1008:0011702
                10R1008:0011707 x 10R1008:0011707
                10R1008:0011709 x 10R1008:0011709
                     12R205:S0011209 x 12R3156:0042105
                                                                  12R3156:0042105: [12r/aleph/9.8-[2231]]
                          12N3895:0005406 x 12N3895:0005406
                               14R205:S0000308 x 14R4126:0017703
                                                                             14R4126:0017703: [14r/bet/24.8-[2425]]
                               14R205:S0000311 x 14R4126:0017703
                                                                             14R4126:0017703: [14r/bet/24.8-[2425]]
                               14R205:S0000614 x 14R4126:0017701
                                                                             14R4126:0017701: [14r/bet/22.8-[2252]]
                                    15R4342:0007002 x 15R4342:0007002
                                         16R205:S0001110 x 16R4472:0004806
                                                                                       16R4472:0004806: [16r/gimmel/26.7-[1
0211
                                                                                       16R4472:0004811: [16r/gimmel/26.7-[1
                                         16R205:S0001309 x 16R4472:0004811
06]]
                                              17R4616:0012904 x 17R4616:0012904
                                             17R4616:0012907 x 17R4616:0012907
                                         16R205:S0001311 x 16R4472:0004811
                                                                                       16R4472:0004811: [16r/gimmel/26.7-[1
06]]
                                    15R4342:0007008 x 15R4342:0007008
                                    15R4342:0007009 x 15R4342:0007009
                               14R205:S0000615 x 14R4126:0017701
                                                                            14R4126:0017701: [14r/bet/22.8-[2252]]
                                                                             14R4126:0017701: [14r/bet/22.8-[2252]]
                               14R205:S0000616 x 14R4126:0017701
                          12N3895:0005409 x 12N3895:0005409
                          12N3895:0005412 x 12N3895:0005412
           09R301:W0033202 x 09R1368:0007709
           09R301:W0033208 x 09R1368:0007703
                10R1009:0011802 x 10R1009:0011802
                10R1009:0011807 x 10R1009:0011807
                     11R305:W0052113 x 11R3158:0037912
                                                                  11R3158:0037912: [11r/aleph/19.8-[1182]]
                          11N3516:0030204 x 11N3516:0030204
                               12R305:W0011311 x 12R3728:0042212
                                                                            12R3728:0042212: [12r/aleph/9.8-[2212]]
                                    13R3896:0015201 x 13R3896:0015201
```

les23w23	Fri Jun 01 16:28:50 2018 2	
	13R3896:0015202 x 13R3896:0015202	1474040,001000, 114, //, , , 0000
1]	14R305:W0000914 x 14R4243:00180	14R4243:0018003: [14r/bet/22.8-[2253
11	14R305:W0003102 x 14R4243:00180	03 14R4243:0018003: [14r/bet/22.8-[2253
	14R305:W0003118 x 14R4243:00180	03 14R4243:0018003: [14r/bet/22.8-[2253
]]	15R4343:0007101 x 15R4343:	0007101
el/26.7-[112]]	16R305:W0001506 x 16F	16R4473:0004904: [16r/gimm
e1/20.7-[112]]	16R305:W0001509 x 16F	.4473:0004904 5 16R4473:0004904: [16r/gimm
el/26.7-[112]]	16R305:W0001511 x 16F	.4473:0004903 16R4473:0004903: [16r/gimm
el/30.7-[264]]	1784620:0013002	x 17R4620:0013002
	17R4620:0013003	x 17R4620:0013003
	17R4620:0013009 16R305:W0002813 x 16F	x 17R4620:0013009 44473:0004912 16R4473:0004912: [16r/gimm
el/26.7-[111]]		
el/26.7-[111]]	16R305:W0002814 x 16F	14473:0004912
15R4343:0007102 x 15R4343:0007102 15R4343:0007104 x 15R4343:0007104		
15R4343:0007104 x 15R4343:0007104 15R4343:0007105 x 15R4343:0007105		
13R3896:0015205 x 13R3896:0015205		
13R3896:0015208 x 13R3896:0015208 13R3896:0015210 x 13R3896:0015210		
09R301:W0035914 x 09R1368:0007706		
09R401:M0033011 x 09R1368:0007703		
09R401:M0033013 x 09R1368:0007709 11R3217:0007703 x 11R3217:0007703		
		8:0042309: [12r/aleph/9.8-[214]]
11R3217:0007704 x 11R3217:0007704		
	12N405:M0036603 x 12N3509:0004302 12N350 13R4070:0015304 x 13R4070:0015304	9:0004302: [12n/bet/7.1-[425,426]]
	13R4070:0015306 x 13R4070:0015306	
	13R4070:0015307 x 13R4070:0015307	
	$13R4070:0015308 \times 13R4070:0015308$ $14R405:M0001310 \times 14R4245:0018210$	
15R4372:0007201 x 15R4372:0007201		
- 1 1	16R405:M0002001 x 16R4474:00050	16R4474:0005009: [16r/gimmel/26.7-[9
5]] 5]]	16R405:M0002002 x 16R4474:00050	16R4474:0005009: [16r/gimmel/26.7-[9
	16R405:M0003103 x 16R4474:00050	01 16R4474:0005001: [16r/gimmel/26.7-[9
4]] / 17R4624:0013102 x 17R4624:0013102		

Fri Jun 01 16:28:50 2018 les23- w23

17R4624:0013104 x 17R4624:0013104 17R4624:0013106 x 17R4624:0013106 17R405:M0002216 x 17R4474:0016104 17R4474:0016104: [17r/gimmel/2.8-[38 611 17R405:M0002303 x 17R4474:0016104 17R4474:0016104: [17r/gimmel/2.8-[38 6]] 17R4474:0016104: [17r/gimmel/2.8-[38 17R405:M0002314 x 17R4474:0016104 6]] 17R405:M0002404 x 17R4474:0016101 17R4474:0016101: [17r/gimmel/2.8-[38 2]] 17R405:M0002413 x 17R4474:0016101 17R4474:0016101: [17r/gimmel/2.8-[38 2]] 17R405:M0002512 x 17R4474:0016101 17R4474:0016101: [17r/gimmel/2.8-[38 2]] 15R4372:0007203 x 15R4372:0007203

15R4372:0007204 x 15R4372:0007204 14R405:M0001311 x 14R4245:0018210

 $14R405:M0001502 \times 14R4245:0018208$ 14R4245:0018208: [14r/bet/22.8-[2296]] 14R405:M0001503 x 14R4245:0018208 14R4245:0018208: [14r/bet/22.8-[2296]]

12N405:M0037210 x 12N3509:0004302 12N3509:0004302: [12n/bet/7.1-[425,426]] 12N405:M0037807 x 12N3509:0004409 12N3509:0004409: [12n/bet/7.1-[429,430]] 12N405:M0042602 x 12N3509:0004409 12N3509:0004409: [12n/bet/7.1-[429,430]] 12N405:M0042604 x 12N3509:0004409 12N3509:0004409: [12n/bet/7.1-[429,430]]

11R3217:0007707 x 11R3217:0007707

09R401:M0036901 x 09R1368:0007701 06R200:S00I1604 x 06R0035:0003509

06R200:S0I10206 x 06R0035:0003506

06R300:W00I1703 x 06R0035:0003509

06R300:W00I8908 x 06R0035:0003501

06R300:W00I9106 x 06R0035:0003503

06R300:W00I9109 x 06R0035:0003506 06R400:M00I1801 x 06R0035:0003509

07R1729:0077314 x 07R1729:0077314

06R400:M00I8514 x 06R0035:0003501

06R400:M00I8802 x 06R0035:0003503

06R400:M00I8806 x 06R0035:0003506