Table 1. Character state matrix of 158 characters for Unionicola mites. The outgroup Neumania is listed first. The character sequence corresponds to characters and character states listed for Unionicola mites in Appendix 6 of Mites of Freshwater Mollusks by Edwards and Vidrine (2014).

Neuamnia	10002103010???????1000013010110001001000000110000000000000000111100000000000321000100010000000000000000000000001000000 1?1?1?1?000100000000000000000010000000?00000000
U.anodontae	121001020220001201100010200000001001000000010100000001000020111110011000100010001001101000000000000000000000000000002020202000100000000000000000100000003201000000
U.ampullariae	01100121110000000001200120110100001?000100000010100000000000021111110000000000133300000000010000000000000000000000020000010202020200010000000000000000020000002101000000
U.wolcotti	01100101020012022010001010001000100101000011110000000000002111111000000000100310000000001000100010000000000000002110001010101010001010011011012000010000003102000000
U.cooki	0110010101000010001100102000100010101100101110000000000000211011000000000122010001000?0?00?000000000000000000010000000000000000000000000000000000000000100000000?00000000
U.perforata	03100102012012?23110011020211000101200010001000100002000020110010011000022?01100001101010000000000000000000031100010 21?1?1?0001000011001111000010000003202000000
U.sinuata	0110010202000011301100102000100010120000000000000000020000201111000110000220000000011010000000000000000000000100000 01?1?1?1?0001000000000000000000100000003201000000
U.hammeni	011001020100001000110010200010001011001000010000000000000021111100011 00??2200??0?00110001000000000000001000013130001???????11011000000000000000001000000 0??1100000
U.macani	01100102021212122010001010001000100001101011110000000100002111111000000010001000100010101000000010000000000020000000101010100010000111100220000101000021020100 00
U.dadayi	01100101010000101011001010001000 1?00000001000300000002000021111110000011102 2?110010000000000000000000000000000020000010101010100010000111100220000100000000?00001000
U.separata	0120100000??????0110010202110001011000001000300000000000121111110000000001100100010 00???00000000000000000000000000000?????000100001111002200000000000000?00000000
U.berezai	03100102100012123010001020001000101201010011000000001000020101010011000022?00100?0110100000000000000000000031100000200000000000011110011111100100000032020000 00
U.megachela	01100102020212122010001020001000101101001011010001002000021111110000000000110100000011010100000000000001000000 1000001 1?1?1?1?0001000011110022000010000003102000000
U.hensleyi	01100101010212123010001010001000100100000011010000000200012111111000000000011010000000102010000000000010000000000000000000000000000010000110011220000100000031010000 00
U.banguiensis	0110011102000011011000111000100010020100001101010000200002011100100000 1130?10101021101001000000000000000000000000000000000000000000000000000200000032120001 10
U.serrata	011001310212121220100013000010001?010100101101000100200002111111000000000330110000011020000000000000000000000000000020202020001010011001122000020000003101000000
U.gledhilli	01100101022000110111000010011003100100000000010000002000020011010000000122?10101011102000000000000000000000000000000001?0100001100000000000000100000032120001 10
U.setifera	0110010101000010001100001000100000000000000000000000000021111110000010011121000000001?000000000000000000000000000000002020202000100000000000000000100000000?00000001
U.latilaminata	0110010101000000000100010200110001011000000000000000000000011111100000000000021000100000000000000000000000000000000002020202000100001111002200001000000 0?00000000
U.tumidipalpis	01100101010000100011001020001000101000000011000010000000002111111000110001 22?0000100????00000000000000000000????0000????????0001000000000000000001000000 0?0?000000
U.billieaehonore	021001011100001200100000110010021000000000000010000000200 11?11110000??00?????????????????10000000000000000000000000002020202000 10???????????????1000000100?000000
U.prehendens	01100101010000100011001010001000100101000010011000000000??????1???0???????????????????????00000000000000000000000000202020200 0?0???????????????10000000???000000
U.inflexa	011001010100001000110010100010001001000000000000000000000021111000000 10011121000010001000100000000000000000000000002020202000 10???????????????10000000?0?000000
U.tumida	021001311211001200100010311010001002010000000100000002000121111110000000 1122?10100001102000000000000000000000200000002020202000100000000000000000310000032020000 00
U.crassipalpis	011001010100001000110010100010001000010000111000000000000011111110000000000122310000000000000000000000000000000000000002020202000100000000000000000100000000?00000000
U.figuralis	0110010101000010001000101000100010000000000000000000000000021111110000000000000210001000000000000000000000000000000000002020202000100000000000000000100000000?00000000
U.pectinatus	01100101010000100010001010001000100101000010030000000000002111111000000000000001000100110?00000000000000000000031101001?0202020001000000000000000001000000 00?0?000000
U.davisi	0110012112100011011000121100100010010100001122000000020000201111000000000 0122?10101001101000000000000000000000 10010001?1?1?1?00010000000000000000020000003 20?000000
U.insolita	0110010101000000000100010200010001010000000000000000000000021111110000010002 2?1000100000000000000000000000000000000000002020202000100000000000000000200000000?00000000
U.gereckei	01100101010000100011001020001000101000000011100000000000002111111000001001010100110000000000000000000000000000000000000202020200010000000000000000010000000 0?00000000
U.aberrans	0110010101000010001100102000100010100000001000000000000000211111100000100000210001000000010000000100000000000000000000202020200010000000000000000010000000 0?00000000
U.longipes	011001010100001000110010100010001000000000100100000000000021111110001100012 2?00001001?0?0000000000000000000000000000002020202000100000000000000000100000000?00000000
U.retractidens	011001010100001000110010200010001010000000100100000000000021111110001100012 2?00001001?0?00000000000000000000003000000???????0011000000000000000001000000 00?00000000
U.statzneri	0110010101000010001100101000100010010000001101000000000000201110000110010 22?0000101010010000000000000000011310001002020202000110000000000000000100000000?00000000
U.falcipes	0111000?????0010001?001020001000101????0??????????00000002011110 00????????????????????1?00000000100000000131000000202020200 0?1000000000000000010000000?00000000
U.falcifera	0110010102101212201000102000100010120100101111000000000000201110000000000 1121000?00010100000000000000000000000200000002020202000100000000000000000100000000?00000000
U.laurentiana	11100101010000100011001010001000101100000000000000000000000211111100000000100211000000000000000000000000000000000000000200000000010000000000000000100000000000000000
U.procursa	011001010220001100110010200110001111000000010101000010000211111000000000000 22?1010000110000000000000000000000001000000202020200010011000000000000100000032000000 00
U.cirrosa	011001010200111020110000000010000111000000110101000010000211111000000000000 22?1010000110000000000000000000000001000000202020200010011000000000000100000032000000 00
U.heardi	01100131121211122110001311011000100100000011010000000311112111010000000010001000100110000000000000000000000031100010 21?1?0200010000110011110000200000031010000 00
U.botswaniana	031001010220001201100010202110001011000000010100000001001020111110000000010001000100110000000000000000000000000000002020202000100000000000000000200000032020000 00
U.brandti	02100121121000120110001201011000100101000001010000000000112111111000000001111?101010011020000000000000000000200000002020202000100000000000000000200000032010000 00
U.conjuncta	011001010100001000110010200000001010010000000000000000000011111110000000010021000?00000?000000000000000000000???000002??????0001?00000000000000001000000 0??0000000
U.furcula	01100101010000100011001020000000101001000001010000000000002111100001100112 2?1000100000000000000000000000000???000002??????0001?00000000000000001000000 01000000000
U.longidens	0110010101000010001100102000000010100100000000000000000000211111100000100000 21000?00??0?00000000000000000000???000002??????0001?00000000000000001000000 0??0000110
U.poirrieri	011001010100001000110010100000001000010000000000000000000021111000000000111210000000100000000000000000000003110000021?1?1?00010000000000000000010000001000000000
U.blayi	011001211200001101100001110110011001010000010000000010000201111100000000100010101001111000000000000000000010000000000020200010111100010101000200000032010000 10
U.arcuata	021001311210001201100013111110001001010000010100000002000121111110000000001330101010011010000000000000000000021000000202020200010000000000000000020000003202000000
U.causeyae	0110010102121212211000101000100010010100100101000100200002111111000000000012311001001100110000000001000000000000000002020202000100001111002200001000000310200000 00
U.campelomaicola	0110011102121212211000111011100010010100000101000000200002111111000000000100311000001100000000000000000000002000000020202020001000011001111000010000002102000000
U.bonzi	0110010102101212201000102000100010100000011010000000000002111111000001100000100010000000000000000000000000000000010202020200010000000000000000010000003100000000
U.aculeata	01100101021012122010001020001000101000000110100000000000021111110000011010021000000010000000000000000000002000000020202020001000000000000000001000000310000000 0
U.hankoi	0110010102101212201000101000100010000000101101000100000002111111000001100120100200001000000000000000000000200000002020202000100001111002200001000000310000011 0
U.bicornis	01100101021012122010001010001000100000001011010001001000021101100000110022?100200011000000000000000000000020000000202020200010000111100220011100000000?01000000
U.formosa	0210012112100012011000121111000010010110001100000000100001211111100000000100010000000 111?00000000000000000000200000101010101000101001100101200002000000320000000 0
U.tetrafurcatus	02100131121000120110001311110000100101000011000000 0?2000?21111100?0000?????1000000111?000000000000000000002000001010101010001010011001122000020000003 20?000000
U.tupara	031100000000000000000110200010001011010000010000000010000201110100000000020101000011020000000000000000000031100000200000000010011000000000000100000032010000 00
U.pachyscelus	03110000000000000000011020001000101101000001000000002000021111100?11000022?01100001102000000000000000000001000001 1?1?1?1?000100??????????????10000003201000000
U.lumbaria	01100101021012122010001020001000101101000001010000000000002111111000000000133000000100010001000001000000000000020000000202020200010100110100220000200000031000000 00
U.parasitica	011001010210121220100010313011001010010000010100000000000021111110000000000002100000000201000010000000000000020000010101010100010100110100220000200000031000000 00
U.pilosa	0110012101000010001200121100100010010000000101000000100002111111000000000111010000000110000000000000000000000000000000202020200010000110000220000100000000?00000000
U.newsumi	011001010100001000110010100010001001000000000300000010000211111000010000022100000000100000000000000000000000000000000020202020001000011110022000010000000?00000000