

Table 3. Morphological data matrix (in Nexus format) used in combined data analysis

```
#NEXUS
BEGIN DATA;
DIMENSIONS NTAX=42 NCHAR=116;
FORMAT MISSING=? SYMBOLS="0123abc" EQUATE="a=(01) b=(12) c=(23)" INTERLEAVE;
MATRIX
[
[
1111111111222222222233333333
1234567890123456789012345678901234567
Amblyopone_pallipes 101000000000000000010010000000002100
Camponotus_laevigatus 0000000000000000020110000010100010100
Formica_moki 0000000000000000010110000010100010100
Linepithema_humile 00000000000000000?0110000011100010100
Myrmecia_pyriformis 000100000000000000001000000001000000
Nothomyrmecia_macrops 00000000000000000010100000001001000
Paraponera_clavata 0000000010000001100000000?0001000000
Aenictus_aratus 0100100000000100321111000011100110100
Aenictus_ceylonicus 0100100000000100321111000011100110100
Aenictus_eugenii 0100100000000100321111000011100110100
Aenictus_laeviceps 0110100000000100321111000011100110100
Aenictus_sp. 0100100000000100321111000011100110100
Dorylus_Alaopone_orientalis 010010000001100121111011010100110101
Dorylus_Anomma_nigricans 0100100000001100121111011010100110101
Dorylus_Dichthadia_laeviceps 0100100000001100121111011010100110101
Dorylus_Rhogmus_sp. 0100100000001100121111011010100110101
Cheliomyrmex_andicola 0100100000000100321111001011100110000
Eciton_burchellii 01001010000000010321011001111100110000
Eciton_dulcium 01001010000000010321011001211100110000
Eciton_hamatatum 01001010000000010321011001111100110000
Eciton_mexicanum 01001010000000010321011001111100110000
Eciton_vagans 01001010000000010321011001211100110000
Labidus_coecus 01001000000000010321011001011100110000
Labidus_spininodis 01001000000000010321011001011100110000
Neivamyrmex_gibbatus 01001000000000010321111001011100110100
Neivamyrmex_halidaii 0100100000000?0321?11001011100110100
Neivamyrmex_postcarinatus 01001000000000010321111001011100110100
Neivamyrmex_pseudops 01001000000000010321111001011100110100
Nomamyrmex_esenbeckii 01001000000000010321011001011100010000
Nomamyrmex_hartigii 01001000000000010321011001011100010000
Acanthostichus_brevicornis 0100010001000000220111000010110111100
Acanthostichus_quadratus 0100010001000000220111000010110111100
Cerapachys_brevis 0100000000100000210111000010100111110
Cerapachys_larvatus 0100000000100000210111000010100111110
Cerapachys_cf._mayri 0100000000100000210111000010100111110
Cerapachys_princeps 0100000000100000210111000010100111110
Cerapachys_kenyensis 0100100100100000210111000010100111100
Cerapachys_cribrinodis_gp._sp. 0100100100100000310111000010100111100
Cerapachys_sp. 0100?00?00100?00c10111000010100?11??0
Cylindromyrmex_striatus 0000010001010000210111000010000101100
Simopone_fulvinodis 0100000000100000220111000010202011000
Sphinctomyrmex_steinheili 0100100000100000310111000010100111100
```

[	<b>33444444444455555555556666666667777]</b>
[	<b><u>890123456789012345678901234567890123</u></b>
Amblyopone_pallipes	010101001000000?00001000000000000000
Camponotus_laevigatus	000000110000000020000210311000000010
Formica_moki	0000001100000000200002?0?11000000010
Linepithema_humile	00000011000000000010210011000000100
Myrmecia_pyriiformis	0000010000000000001000000000000000
Nothomyrmecia_macrops	0000001100000000010001000000000000
Paraponera_clavata	0001010010000000?0000000000000000
Aenictus_aratus	10111211000010311?310210201110001110
Aenictus_ceylonicus	10111211000010311?310210201100001110
Aenictus_eugenii	10111211000010311?310210201100001110
Aenictus_laeviceps	10111211000010311?310210201100001110
Aenictus_sp.	10111211000010311?3102102011?0001110
Dorylus_Alaopone_orientalis	100100110100102111100210211110111111
Dorylus_Anomma_nigricans	100100110100102111100210211110111111
Dorylus_Dichthadia_laeviceps	100100110100102111100210211110111111
Dorylus_Rhogmus_sp.	100100110100102111100210211110111111
Cheliomyrmex_andicola	101100110001113?a????210101????0110
Eciton_burchellii	101101110001113000210210101122000110
Eciton_dulcium	101101110001113000210210101122000110
Eciton_hamatatum	101101110001113000210210101122000110
Eciton_mexicanum	101101110001113000210210101122000110
Eciton_vagans	101101110001113000210210101122000110
Labidus_coecus	1011011100011130????210101122000110
Labidus_spininodis	1011011100011130????210101122000110
Neivamyrmex_gibbatus	101101110001113000210210101121000110
Neivamyrmex_halidaii	101101110001113000210210101121000110
Neivamyrmex_postcarinatus	101101110001113000210210101121000110
Neivamyrmex_pseudops	101101110001113000210210101121000110
Nomamyrmex_esenbeckii	101101110001113????210101121000110
Nomamyrmex_hartigii	101101110001113????210101121000110
Acanthostichus_brevicornis	110101000000101????210001000000010
Acanthostichus_quadratus	110101000000101????210001000000010
Cerapachys_brevis	100101000000101?00?0?210001000000110
Cerapachys_larvatus	100101000000101?00?0?210001000000110
Cerapachys_cf._mayri	100101000000101?00?0?210001000000110
Cerapachys_princeps	100101000000101?00?0?210001000000110
Cerapachys_kenyensis	100101000000101????210001000000110
Cerapachys_cribrinodis_gp._sp.	100101000000101????210001000000110
Cerapachys_sp.	10?101000000101????210001000000110
Cylindromyrmex_striatus	100101000000101????0????01000000000
Simopone_fulvinodis	100101000000101????????01000000??0
Sphinctomyrmex_steinheili	100101000110101????210001000000110

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[
[
[
11111111111111111111]
77777788888888889999999999000000000011111111]
4567890123456789012345678901234567890123456]
Amblyopone_pallipes 00120000000000010000000000a0000000000000000
Camponotus_laevigatus 01100000000100000200000000000000??00001000
Formica_moki 01100000000100000200000000000000?000001000
Linepithema_humile 01100000000100000200000000000000??20110000
Myrmecia_pyriformis 00000000001010000000000000000000??10000101
Nothomyrmecia_macrops 00000000001010000000001000000000??10000101
Paraponera_clavata 0000000000001001000000100000000000000000000000
Aenictus_aratus 0111110011111101121010101011000000011010020
Aenictus_ceylonicus 0111110011111101121010101011000000011010020
Aenictus_eugenii 01111100111b1101121010101011000000011010020
Aenictus_laeviceps 01111100111b1101121010101011000000011010020
Aenictus_sp. 01111100111111011210101010110000000110100c0
Dorylus_Alaopone_orientalis 0111111011110101120010102011300000011110030
Dorylus_Anomma_nigricans 0111111011111101120010102011300000011110010
Dorylus_Dichthadia_laeviceps 0111111011111101120010102011300000011110000
Dorylus_Rhogmus_sp. 0111111011111101120010102011300000011110010
Cheliomyrmex_andicola 10110100101111001101011111112111100111?0000
Eciton_burchellii 10110100101111001101011111111212001111000000
Eciton_dulcium 00110100101111001101011111111212001111000000
Eciton_hamatatum 00110100101111001101011111111212001111000000
Eciton_mexicanum 10110100101111001101011111111212001111000000
Eciton_vagans 10110100101111001101011111111212001111000000
Labidus_coecus 10110100101111001101011111111212210011000000
Labidus_spininodis 10110100101111001101011111111212210011000000
Neivamyrmex_gibbatus 101101001011110011010111111111110101010000
Neivamyrmex_halidaii 101101001011110011010111111111110101010000
Neivamyrmex_postcarinatus 101101001011110011010111111111110101010000
Neivamyrmex_pseudops 101101001011110011010111111111110101010000
Nomamyrmex_esenbeckii 1011010010111110110101111111121201111??00000
Nomamyrmex_hartigii 1011010010111110110101111111121201111??00000
Acanthostichus_brevicornis 001000000001000100000010001100000??1?000000
Acanthostichus_quadratus 001000000001000100000010001100000??1?000000
Cerapachys_brevis 0?1000010001000100000010001100000??10000000
Cerapachys_larvatus 0?1000010001000100000010001100000??10000000
Cerapachys_cf._mayri 0?1000010001000100000010001100000??10000000
Cerapachys_princeps 0?1000010001000100000010001100000??10000000
Cerapachys_kenyensis 0?1000010001000100000010001100000??10000000
Cerapachys_cribrinodis_gp._sp. 0?1000010001000100000010001100000??10000000
Cerapachys_sp. 0?1000010001000100000010001100000??100000?0
Cylindromyrmex_striatus 001000010010000100000010001100000??0?0000
Simopone_fulvinodis 0?10000100?1000100000010101100000??10000010
Sphinctomyrmex_steinheili 001000010001000100000010001100000??10000000
;
end;
typeset ordered = Ord:17 29 43 67 85 115;

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Characters 17, 29, 43, 67, 85, and 115 are ordered; all other multistate characters are unordered. Polymorphisms are indicated by letters: a = 0, 1; b = 1, 2; c = 2, 3. A question mark (?) indicates unknown state. The first seven taxa are outgroups.