**Приложение 2.** Набор последовательностей 411 пар нуклеотидов фрагмента контрольного района митохондриальной ДНК трёх форм ленка рода *Brachymystax*, использованных в данной работе

#NEXUS

[File generated by DnaSP Ver. 6.12.03; апр 14, 2023]

[Haplotype Data from Data File: seqdumpCR9ccc.fas]

[Number of sequences: 170 Number of sequences used: 170]

[Number of Sites in the complete Data File: 411]

[Selected Region: 1-411]

[Sites with alignment gaps: considered]

[Invariable sites: removed]

BEGIN TAXA;

DIMENSIONS NTAX=37;

TAXLABELS

Hap\_1

Hap\_2

Hap\_3

Hap\_4

Hap\_5

Hap\_6

Hap\_7

Hap\_8

Hap\_9

Hap\_10

Hap\_11

Hap\_12

Hap\_13

Hap\_14

Hap\_15

Hap\_16

Hap\_17

Hap\_18

Hap\_19

Hap\_20

Hap\_21

Hap\_22

Hap\_23

Hap\_24

Hap\_25

Hap\_26

Hap\_27

Hap\_28

Hap\_29

Hap\_30

Hap\_31

Hap\_32

Hap\_33

Hap\_34

Hap\_35

Hap\_36

Hap\_37;

END;

[Hap# Freq. Sequences]

[Hap\_1: 15 MF373757.1 MH885382.1 MH885383.1 MH885385.1 MH885384.1 EU395731.1 FJ713578.1 AY230453.1 FJ713577.1 MW367314.1 MW367311.1 MW367310.1 MW367307.1 MW367306.1 MW367305.1]

[Hap\_2: 1 MF373756.1]

[Hap\_3: 2 MH885387.1 MH885386.1]

[Hap\_4: 6 MH885388.1 FJ713576.1 DQ017068.1 DQ017070.1 DQ017069.1 DQ017071.1]

[Hap\_5: 16 MF373755.1 EU395732.1 AY230451.1 MK652422.1 MK652421.1 MK652420.1 MK652419.1 MK652418.1 MK652417.1 MK652416.1 MK652415.1 MK652414.1 MK652413.1 MK652412.1 MK652411.1 MK652410.1]

[Hap\_6: 24 MH885397.1 MH885399.1 MH885402.1 MH885400.1 MH885401.1 MH885406.1 MH885390.1 MH885391.1 MH885392.1 MH885394.1 MH885393.1 MH885411.1 MH885410.1 MH885408.1 MH885409.1 FJ713570.1 AY230471.1 AY230456.1 EU395719.1 EU395724.1 DQ017079.1 DQ017076.1 EU395724BrachymystaxHap8 EU395721BrachymystaxHap5]

[Hap\_7: 5 MH885398.1 MH885396.1 EU395717.1 AY230472.1 EU395718BrachymystaxHap2]

[Hap\_8: 9 MH885404.1 MH885403.1 MH885405.1 MH885407.1 EU395720.1 FJ713571.1 AY230466.1 DQ017074.1 DQ017073.1]

[Hap\_9: 2 MH885395.1 MH885412.1]

[Hap\_10: 8 JN680731.1 JN680735.1 JN680730.1 JN680732.1 JN680733.1 KX505380.1 KX505379.1 KX505378.1]

[Hap\_11: 6 JN680738.1 AF125519.1 JN680736.1 JN680737.1 KX505382.1 KX505381.1]

[Hap\_12: 4 MH885368.1 MH885380.1 MH885381.1 MH885373.1]

[Hap\_13: 30 MH885369.1 MF373753.1 JX227987.1 MH885375.1 MH885377.1 MH885376.1 MH885378.1 MH885379.1 NC\_018342.1 JQ686731.1 MH885372.1 MH885370.1 MH885371.1 MF373754.1 MF373752.1 KC136268.1 DQ017075.1 DQ017067.1 KF487134.1 KF487131.1 KF647844.1\_ZZ8 KF647842\_YX6 KF647840\_YX4 KF647839\_TB3 KF647838\_TB2 KF647837\_hap1 KF487137\_BD49 KF487138\_BD55 KF487136\_XY22 KF487135\_XS41]

[Hap\_14: 2 KX505377.1 JN680734.1]

[Hap\_15: 3 MH885374.1 DQ017078.1 KF647845.1]

[Hap\_16: 3 EU395729.1 EU395730.1 AY230458.1]

[Hap\_17: 1 EU395733.1]

[Hap\_18: 6 EU395728.1 EU395727.1 AY862361.1 AY230454.1 AY230463.1 MK652423.1]

[Hap\_19: 1 EU395726.1]

[Hap\_20: 1 EU395725.1]

[Hap\_21: 2 EU395723.1 EU395722.1]

[Hap\_22: 3 FJ713572.1 MW367308.1 MW367302.1]

[Hap\_23: 1 KC136270.1]

[Hap\_24: 1 KC136269.1]

[Hap\_25: 1 AY230468.1]

[Hap\_26: 1 FJ713574.1]

[Hap\_27: 5 MW367315.1 MW367312.1 MW367309.1 MW367304.1 MW367303.1]

[Hap\_28: 1 MK652425.1]

[Hap\_29: 2 EU395735.1 EU395734.1]

[Hap\_30: 1 DQ017066.1]

[Hap\_31: 1 DQ017077.1]

[Hap\_32: 1 DQ017072.1]

[Hap\_33: 1 KF487132.1]

[Hap\_34: 1 KF647841.1]

[Hap\_35: 1 KF647843.1]

[Hap\_36: 1 HQ317211Hucho]

[Hap\_37: 1 AY862360.1]

BEGIN CHARACTERS;

DIMENSIONS NCHAR=51;

FORMAT DATATYPE=DNA MISSING=? GAP=- MATCHCHAR=.;

CHARLABELS

 [1] nt\_21 [2] nt\_23 [3] nt\_24 [4] nt\_30 [5] nt\_37

 [6] nt\_38 [7] nt\_39 [8] nt\_41 [9] nt\_44 [10] nt\_47

 [11] nt\_48 [12] nt\_66 [13] nt\_69 [14] nt\_74 [15] nt\_81

 [16] nt\_84 [17] nt\_88 [18] nt\_91 [19] nt\_97 [20] nt\_98

 [21] nt\_100 [22] nt\_102 [23] nt\_124 [24] nt\_134 [25] nt\_137

 [26] nt\_154 [27] nt\_155 [28] nt\_160 [29] nt\_161 [30] nt\_164

 [31] nt\_216 [32] nt\_228 [33] nt\_229 [34] nt\_244 [35] nt\_253

 [36] nt\_260 [37] nt\_285 [38] nt\_292 [39] nt\_295 [40] nt\_311

 [41] nt\_318 [42] nt\_324 [43] nt\_346 [44] nt\_347 [45] nt\_351

 [46] nt\_374 [47] nt\_386 [48] nt\_391 [49] nt\_399 [50] nt\_409

 [51] nt\_410

;

MATRIX

[ 10 20 30 40 50 ]

[ \* \* \* \* \* ]

Hap\_1 GCCATGAGATCAATATATGTATCATGCACACACAATATAAATGG-ATATAG

Hap\_2 ...............................G............-......

Hap\_3 .....................................C......-......

Hap\_4 A.....GC.................A..T...............-......

Hap\_5 A...........................................-......

Hap\_6 A.TG........................T.T......C...CAA-......

Hap\_7 A.TG................G.......T.T......C...CAA-......

Hap\_8 A.TG.......G................T.T......C...CAA-......

Hap\_9 A.T.................G.......T.T......C...CAA-......

Hap\_10 A.T..C................A...T.T........C......-.C....

Hap\_11 A.T...................A.C.T.T...T....C......-......

Hap\_12 A.T...................A...T.T.T.T....C......-.C....

Hap\_13 A.T...................A.C.T.T.T.T....C......-.C....

Hap\_14 A.T...................A...T.T....G...C......-.C....

Hap\_15 A.T...................A.C.T.T.T......C......-.C....

Hap\_16 ..................A.........................-......

Hap\_17 A...........................T.......GC......-......

Hap\_18 ............................T...............-......

Hap\_19 A.TG........................T.T......C...CAA-.C....

Hap\_20 A.TG.........C..............T.T......C...CAA-......

Hap\_21 A.TG..............A.........T.T......C...CAA-......

Hap\_22 A.TG........................T.T...G..C...CAA-......

Hap\_23 A.T.....C.............A.C.T.T.T.T....C......-.C....

Hap\_24 A.T.....C.T.....C.....A.C.T.T.T.T....C......-.C....

Hap\_25 A.TG................G.......TGT......C...CAA-......

Hap\_26 A................C..G.......T........C......-......

Hap\_27 A.TG........................T.T......C...CAA-...C..

Hap\_28 A..........................C................-......

Hap\_29 A.........T...............T.........GC......-......

Hap\_30 .......................................-....A......

Hap\_31 ATT...................A...T.T.T.T....C......-.C....

Hap\_32 A.T...................A...T.T...T....C......-.C....

Hap\_33 A.T................G.GA.C.T.T.T.T..G.C......-.C....

Hap\_34 A.T...................A.C.T.T.T.T.G..C..G...-.C....

Hap\_35 A.T...........G.......A.C.T.T.T.T....C......-.C....

Hap\_36 A.TGC..A.CTGG..G......ATC...T.T..G...CC..C..-G.C.TA

Hap\_37 A.TGC..A.CT...........ATC...T.T..G..GCC..C..-G.C.TA