LOCUS BSeq#1 19952 bp DNA circular 21-SEP-2018

DEFINITION Polypedates megacephalus voucher 20130003 mitochondrion, complete

 genome.

ACCESSION BSeq#1

VERSION

KEYWORDS .

SOURCE mitochondrion Polypedates megacephalus voucher 20130003

 ORGANISM Polypedates megacephalus voucher 20130003

 Unclassified.

REFERENCE 1 (bases 1 to 19952)

 AUTHORS Huang,A. and Zhang,M.

 TITLE Unpublished

 JOURNAL unpublished

REFERENCE 2 (bases 1 to 19952)

 AUTHORS Huang,A. and Zhang,M.

 TITLE Direct Submission

 JOURNAL Submitted (21-SEP-2018) College of Science and Technology, Sichuan

 Agricultural University, #211 Huimin Road Wenjiang, Chengdu,

 Sichuan 611130, P.R. China

COMMENT Bankit Comment: TAX: No, not new species/combinations; SEE

 ATTACHMENT

 Bankit Comment: ALT EMAIL:99709978@qq.com

 Bankit Comment: TOTAL # OF SEQS:1

 ##Assembly-Data-START##

 Assembly Method :: A5-miseq v. v20150522; SPAdes v. v3.9.0

 Sequencing Technology :: Illumina

 ##Assembly-Data-END##

FEATURES Location/Qualifiers

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 /organism="Polypedates megacephalus voucher 20130003"

 /organelle="mitochondrion"

 /mol\_type="genomic DNA"

 /country="China"

 /collection\_date="2017"

 /collected\_by="MingWang Zhang"

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 /product="tRNA-Thr"

 tRNA 72..143

 /product="tRNA-Leu"

 /note="codons recognized: CUN"

 tRNA complement(149..217)

 /product="tRNA-Pro"

 tRNA 219..288

 /product="tRNA-Phe"

 rRNA 287..1216

 /product="12S ribosomal RNA"

 tRNA 1217..1285

 /product="tRNA-Val"

 rRNA 1286..2856

 /product="16S ribosomal RNA"

 tRNA 2859..2932

 /product="tRNA-Leu"

 /note="codons recognized: UUR"

 gene 2936..3896

 /gene="ND1"

 CDS 2936..3896

 /gene="ND1"

 /note="TAA stop codon is completed by the addition of 3' A

 residues to the mRNA'"

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 /transl\_table=2

 /product="NADH dehydrogenase subunit 1"

 /translation="MTQMLYLTHPIMFIAPILLAVAFFTLIERKVLGYMQHRKGPNKV

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 TMSILFILAVSSLTVYTILGSGWASNSKYALIGSLRAVAQTISYEVTMALIILCSIFL

 AGGFTLSIFNVTQQHLWLLLPLWPLALMWYITTLAETNRAPFDLTEGESELVSGFNVE

 YASGPFALFFLAEYANILMMNTLSTILFLGAAMLMKTLSTIFLMLKASSMSIYFLWIR

 ASYPRFRYDQLMHLAWKNFLPITIAATMIFISMPTSTLISPPIM"

 tRNA 3897..3967

 /product="tRNA-Ile"

 tRNA complement(3967..4037)

 /product="tRNA-Gln"

 tRNA 4037..4105

 /product="tRNA-Met"

 gene 4106..5143

 /gene="ND2"

 CDS 4106..5143

 /gene="ND2"

 /codon\_start=1

 /transl\_table=2

 /product="NADH dehydrogenase subunit 2"

 /translation="MNPLAYSMFLLSLAIGTTTTLLSHHWLLAWIGLEINTLAIIPVI

 TKIPHPRAIEAATKYFLTQATASIIVLFSALMNAWSTGQWTITSALDHMTIILTLALM

 MKLGLAPLHFWLPEVLQGTPLFTGLIISTWQKIAPMTLLLQLTHHINIYAATSIGLLS

 IFIGGWGGINQTQMRKILAFSSIGHLGWMMLVLKFDPSLTEFNFILYIIMTTAMFLLL

 TSTHAMKLLDISILWAKTPMLVAISMLTLLSLAGLPPLTGFMPKLMISLELIKQNMVI

 FVTLAMLASLLALFFYLRLTYVMVMITAPNMSTTNSLWRMTIKINSLTALFNNLAIFT

 IMMTPTIILFL"

 tRNA 5142..5212

 /product="tRNA-Trp"

 tRNA complement(5213..5282)

 /product="tRNA-Ala"

 tRNA complement(5284..5356)

 /product="tRNA-Asn"

 rep\_origin complement(5359..5384)

 /note="L-strand origin of replication"

 tRNA complement(5384..5448)

 /product="tRNA-Cys"

 tRNA complement(5449..5515)

 /product="tRNA-Tyr"

 gene 5520..7073

 /gene="COI"

 CDS 5520..7073

 /gene="COI"

 /codon\_start=1

 /transl\_table=2

 /product="cytochrome c oxidase subunit I"

 /translation="MLTRWFFSTNHKDIGTLYLVFGAWAGMIGTALSLLIRAELSQPG

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 LLPPSFLLLLASSTVEAGVGTGWTVYPPLAGNLAHAGPSVDLAIFSLHLAGVSSILGA

 INFITTILNMKPAALTQYQTPLFIWSVLITAVLLLLSLPVLAAGITMLLTDRNLNTTF

 FDPAGGGDPVLYQHLFWFFGHPEVYILILPGFGIISHVVAFYSYKKEPFGYMGMVWAM

 LSIGFLGFIVWAHHMFTTDLNVDTRAYFTSATMIIAIPTGVKVFSWLATMHGGIIKWD

 AAMLWALGFIFLFTVGGLTGVVLANSSIDIVLHDTYYVVAHFHYVLSMGAVFAIMAGF

 VHWFPLFTGYKLHAAWTKIQFVIMFAGVNLTFFPQHFLGLAGMPRRYSDYPDAYTLWN

 TTSSIGSVISLIAVMVMIFIVWEAFSSKRVFLHSDLTSSNVEWTLGFPPAHHTFEEAT

 FSITLREKG"

 tRNA complement(7061..7131)

 /product="tRNA-Ser"

 /note="codons recognized: UCN"

 tRNA 7133..7201

 /product="tRNA-Asp"

 gene 7202..7891

 /gene="COII"

 CDS 7202..7891

 /gene="COII"

 /codon\_start=1

 /transl\_table=2

 /product="cytochrome c oxidase subunit II"

 /translation="MAQPTQFGLQDAASPIMEELIHFHDHTLMAVLLISTLVLYIIIT

 LMASKLFSTNLTDAQEIEMVWTIMPAVILIVIALPSLRILYLMDEISSPDLTVKTVGH

 QWYWTYEYSDFDNIGFDSYMLPTKDLDPGSFRLLEVDNRMVVPTGTLTRILVTADDVL

 HSWALPSLGIKTDAIPGRLTQASILVAHPGVYYGQCSEICGANHSFMPIVVEALPIRD

 FLPWILEMQDS"

 tRNA 7897..7966

 /product="tRNA-Lys"

 gene 8829..9507

 /gene="ATP6"

 CDS 8829..9507

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 residues to the mRNA"

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 /transl\_table=2

 /product="ATP synthase subunit 6"

 /translation="MGSLFSQFTSPTLFGIHLFLIAMIFPWLFFYSPSNRWIPNRLIT

 VQSLFLGTFAKHILMPTNKPAHKWALLIVTVMVFLLSMNLMGLLPYTFTPTTQLPLNL

 GLAIPLWLATVLVGLRNQLSASLAHFLPEGTPTPLIPILIIIETISLLIRPIALGVRL

 MANLTAGHLLIQLIATATMFMIPLSTVVSLMSFTVLLLLTILEIAVAMIQAYVFVLLF

 SLYLHENT"

 gene 9508..10291

 /gene="COIII"

 CDS 9508..10291

 /gene="COIII"

 /note="TAA stop codon is completed by the addition of 3' A

 residues to the mRNA"

 /codon\_start=1

 /transl\_table=2

 /product="cytochrome c oxidase subunit III"

 /translation="MNHQAHAFHMVNPSPWPLTGASAAFLLTCGLAMWFHFNSTVTMT

 LGMMLMFLTMYQWWRDVVREGTFQGHHTIPVHKGLRYGMVLFITSEIFFFMGFFWAFY

 NASLAPTPDVGETWPPTGITPLNPFEVPLLNTAVLLASGVSVTWAHHSVMLGNKKNMI

 QALTLTILLGIYFTALQAMEYYEAPFTLADGIYGTTFFVATGFHGLHVIIGTMFLFTC

 LLRQMFNHFTTQHHFGFEGAAWYWHFVDVVWLFLFVSIYWWGF"

 tRNA 10292..10359

 /product="tRNA-Gly"

 gene 10360..10699

 /gene="ND3"

 CDS 10360..10699

 /gene="ND3"

 /note="TAA stop codon is completed by the addition of 3' A

 residues to the mRNA"

 /codon\_start=1

 /transl\_table=2

 /product="NADH dehydrogenase subunit 3"

 /translation="MLAFLLVTILLSVILAGASFWLATLLPDTEKLSPYECGFDPLGS

 ARLPYSMRFFLVAILFLLFDLEIALLLPLPWALQLPHPLPVIMWATVILLLLTAGFLY

 EWLQDGLEWAE"

 tRNA 10700..10768

 /product="tRNA-Arg"

 gene 10769..11053

 /gene="ND4L"

 CDS 10769..11053

 /gene="ND4L"

 /codon\_start=1

 /transl\_table=2

 /product="NADH dehydrogenase subunit 4L"

 /translation="MVYLLPTMYLITLIGLAAHRMHLLSALLCLEGLMLVTYIALSLC

 PNYLTLAAYVFPVFLLSMSACGAALGLALMVATYRSHGNDNLITLNLLQC"

 gene 11047..12409

 /gene="ND4"

 CDS 11047..12409

 /gene="ND4"

 /note="TAA stop codon is completed by the addition of 3' A

 residues to the mRNA"

 /codon\_start=1

 /transl\_table=2

 /product="NADH dehydrogenase subunit 4"

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 TTLLAFSTSDLMLFFIFFEASLIPTMIIITRWGAQERRLEAGMYLAFYTMMGAVPLMI

 WFIKLYVLSGSVLPVYLKTMSIMQPETTFPGLFWTMYNAAFLVKLPMYCLHLWLPKAH

 VEAPIAGSMVLAGTLLKLGGYGILRTSLVLPNVFLSKTLPIMMIAIMGVLMTALLCLR

 QTDLKSLIAMSSVSHMNLVIAAALISTPWSYSGATIMMIAHGLSSSALFCLANTAYER

 TNSRTMIIIRGMILLFPLGWAWWLIMALFNIALPPSISFAGEFLIITSLFNWSPVTFI

 FVVMNLIFTTAYTLYVLWATQRGPLPNHIKTLFPLSTREHILLYLHILPALLLITKPN

 LIMF"

 tRNA 12410..12478

 /product="tRNA-His"

 tRNA 12479..12546

 /product="tRNA-Ser"

 /note="codons recognized: AGY"

 gene complement(12549..13040)

 /gene="ND6"

 CDS complement(12549..13040)

 /gene="ND6"

 /codon\_start=1

 /transl\_table=2

 /product="NADH dehydrogenase subunit 6"

 /translation="MIAEMNLLIGLVAVASNPSPFFAALGLVWGAGAGCFVLVKSGLG

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 MGGDIKYNMGQDLILVEWWGVAELLGAGGWMLVCCGWGLLLTLFVVLEVVRGYSVGAL

 RAV"

 tRNA complement(13041..13109)

 /product="tRNA-Glu"

 gene 13114..14269

 /gene="Cytb"

 CDS 13114..14269

 /gene="Cytb"

 /note="TAA stop codon is completed by the addition of 3' A

 residues to the mRNA"

 /codon\_start=1

 /transl\_table=2

 /product="cytochrome b"

 /translation="MTPAMRKAHPAIKIINNSFIDLPTPANLSAWWNFGSLLGVCLIA

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 LYYGSFNFKETWNIGVILLFLLMATAFVGYVLPWGQMSFWGATVITNLMSAAPYIGNT

 LVQWIWGGFSVDNATLTRFFTFHFILPFAIMGASMMHLLFLHQTGSSNPTGLNSNLDK

 IPFHPYFSYKDILGFIIMLTSLALLSTFNPNLLGDPDNFTPANPLVTPPHIKPEWYFL

 FAYAILRSIPNKLGGVLALLFSIIVLLFVPLTNTSKQRTMAFRPLTKILFWVLIANTV

 ILTWIGGQPVEDPFIIIGQLASGLYFIVFILLLPLTGVAENKLMNLPHHTM"

 D-loop 14270..15843

 gene 15844..17622

 /gene="ND5"

 CDS 15844..17622

 /gene="ND5"

 /codon\_start=1

 /transl\_table=2

 /product="NADH dehydrogenase subunit 5"

 /translation="MAPALTIFIIMLTPLLRLGKTTFPAMAKTAIKTAFFVSLTLLSL

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 PNLETFMKYLLIFLMAMIVLVSAGNLFTLFIGWEGVGIMSYLLIGWFHGRANAATAAV

 QAVLYNRIGDIGFLVIFCWALKELTLTNMQAMYSFHPPTPILMAFILAAASKSAQFGL

 HPWLAAAMEGPTPVSALLHSSTMVVAGIFLMIRIHPIIAQNPHALTTCLCLGALSTFY

 AAASALPQNDIKKVIAHSTSSQLGLMMVAIGINQPHLAFFHICTHAFFKAMLFLCAGL

 FIHSLNDEQDIRKMGGLFNILPMTTTSFLVGSLALMGTPFLSAFYSKDAIIETMNNSF

 TNSVALTLTLIATAFTAVYSVRLIYFVSLGNTRLNNPTTLINESSTMSAVTPIIRLAY

 GSIFAGVMIFQLLIPNTPIIHTMSMSNKLTATVLTILAFLLAFDIIKMPTLAKWPTKK

 LLDPSLYNFVIHRLSAKTALAIAGYTISFMVESFMLKTKATSIMHAQKPAMQILQQAQ

 TGKIKTYLLSTTMTLMMAYAALMIGL"

 D-loop 17623..19952

BASE COUNT 6020 a 4915 c 2948 g 6069 t

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 61 tacccaggac tgcttttaat ggaaaaaagt cttccactgg ctttaggcgc caacaactct

 121 tggtgcaaac ccaagtaaaa gctttaactc aaaacaaaag gaatttaacc tcttccactg

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