

Supplementary tables:

Table S1. Molecular identification of immature stages using BIN congruence method and clustering analysis using Chironomidae nucleotide distance optimal threshold.

| Premature stage | Process ID | Subfamily | BIN congruence method | BIN url | Identification though clustering |
|-----------------|-------------|---------------------|-----------------------------|--------------|----------------------------------|
| Larvae | PGBAL166-19 | <i>Chironominae</i> | <i>Benthalia carbonaria</i> | BOLD:ADF1214 | Congruent |
| Larvae | PGBAL228-19 | <i>Chironominae</i> | <i>Benthalia carbonaria</i> | BOLD:ADF1214 | Congruent |
| Larvae | PGBAL229-19 | <i>Chironominae</i> | <i>Benthalia carbonaria</i> | BOLD:ADF1214 | Congruent |
| Larvae | PGBAL261-19 | <i>Chironominae</i> | <i>Benthalia carbonaria</i> | BOLD:ADF1214 | Congruent |
| Larvae | PGBAL262-19 | <i>Chironominae</i> | <i>Benthalia carbonaria</i> | BOLD:ADF1214 | Congruent |
| Larvae | PGBAL265-19 | <i>Chironominae</i> | <i>Benthalia carbonaria</i> | BOLD:ADF1214 | Congruent |
| Larvae | PGBAL286-19 | <i>Chironominae</i> | <i>Benthalia carbonaria</i> | BOLD:ADF1214 | Congruent |
| Larvae | PGBAL287-19 | <i>Chironominae</i> | <i>Benthalia carbonaria</i> | BOLD:ADF1214 | Congruent |
| Larvae | PGBAL288-19 | <i>Chironominae</i> | <i>Benthalia carbonaria</i> | BOLD:ADF1214 | Congruent |
| Larvae | PGBAL290-19 | <i>Chironominae</i> | <i>Benthalia carbonaria</i> | BOLD:ADF1214 | Congruent |
| Larvae | PGBAL298-19 | <i>Chironominae</i> | <i>Benthalia carbonaria</i> | BOLD:ADF1214 | Congruent |
| Larvae | CHBAL110-20 | <i>Chironominae</i> | <i>Chironomus</i> | BOLD:AAW4002 | <i>Chironomus cingulatus</i> |
| Larvae | PGBAL116-19 | <i>Chironominae</i> | <i>Chironomus</i> | BOLD:AAW4002 | <i>Chironomus cingulatus</i> |
| Larvae | CHBAL108-20 | <i>Chironominae</i> | <i>Chironomus</i> | BOLD:ACD8415 | Congruent |
| Larvae | PGBAL165-19 | <i>Chironominae</i> | <i>Chironomus</i> | BOLD:ACD8415 | Congruent |
| Larvae | PGBAL212-19 | <i>Chironominae</i> | <i>Chironomus</i> | BOLD:ACD8415 | Congruent |
| Larvae | PGBAL219-19 | <i>Chironominae</i> | <i>Chironomus</i> | BOLD:ACD8415 | Congruent |
| Larvae | PGBAL223-19 | <i>Chironominae</i> | <i>Chironomus</i> | BOLD:ACD8415 | Congruent |
| Larvae | PGBAL299-19 | <i>Chironominae</i> | <i>Chironomus</i> | BOLD:ACD8415 | Congruent |
| Larvae | PGBAL311-19 | <i>Chironominae</i> | <i>Chironomus</i> | BOLD:ACD8415 | Congruent |
| Larvae | PGBAL363-19 | <i>Chironominae</i> | <i>Chironomus</i> | BOLD:ACD8415 | Congruent |
| Larvae | PGBAL387-19 | <i>Chironominae</i> | <i>Chironomus</i> | BOLD:ACD8415 | Congruent |

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|--------|-------------|---------------------|------------------------------|--------------|--------------|
| Larvae | PGBAL117-19 | <i>Chironominae</i> | <i>Chironomus</i> | BOLD:AAW4002 | Congruent |
| Larvae | PGBAL370-19 | <i>Chironominae</i> | <i>Chironomus</i> | BOLD:AAW4002 | Congruent |
| Larvae | PGBAL388-19 | <i>Chironominae</i> | <i>Chironomus</i> | BOLD:AAW4002 | Congruent |
| Larvae | PGBAL391-19 | <i>Chironominae</i> | <i>Chironomus</i> | BOLD:AAW4002 | Congruent |
| Larvae | PGBAL397-19 | <i>Chironominae</i> | <i>Chironomus</i> | BOLD:AAW4002 | Congruent |
| Pupae | PGBAL430-19 | <i>Chironominae</i> | <i>Chironomus</i> | BOLD:AAW4002 | Congruent |
| Larvae | CHBAL109-20 | <i>Chironominae</i> | <i>Chironomus annularius</i> | BOLD:AEB4425 | Congruent |
| Larvae | PGBAL398-19 | <i>Chironominae</i> | <i>Chironomus annularius</i> | BOLD:AEB4425 | Congruent |
| Larvae | CHBAL114-20 | <i>Chironominae</i> | <i>Chironomus aprilinus</i> | BOLD:AAF3277 | Congruent |
| Larvae | CHBAL124-20 | <i>Chironominae</i> | <i>Chironomus aprilinus</i> | BOLD:AAN2734 | Chironomidae |
| Larvae | CHBAL115-20 | <i>Chironominae</i> | <i>Chironomus luridus</i> | BOLD:AAJ4282 | Congruent |
| Larvae | CHBAL116-20 | <i>Chironominae</i> | <i>Chironomus luridus</i> | BOLD:AAJ4282 | Congruent |
| Larvae | CHBAL117-20 | <i>Chironominae</i> | <i>Chironomus luridus</i> | BOLD:AAJ4282 | Congruent |
| Larvae | CHBAL118-20 | <i>Chironominae</i> | <i>Chironomus luridus</i> | BOLD:AAJ4282 | Congruent |
| Larvae | CHBAL119-20 | <i>Chironominae</i> | <i>Chironomus luridus</i> | BOLD:AAJ4282 | Congruent |
| Larvae | CHBAL120-20 | <i>Chironominae</i> | <i>Chironomus luridus</i> | BOLD:AAJ4282 | Congruent |
| Larvae | CHBAL121-20 | <i>Chironominae</i> | <i>Chironomus luridus</i> | BOLD:AAJ4282 | Congruent |
| Larvae | CHBAL184-20 | <i>Chironominae</i> | <i>Chironomus luridus</i> | BOLD:AAJ4282 | Congruent |
| Larvae | CHBAL185-20 | <i>Chironominae</i> | <i>Chironomus luridus</i> | BOLD:AAJ4282 | Congruent |
| Larvae | PGBAL114-19 | <i>Chironominae</i> | <i>Chironomus luridus</i> | BOLD:AAJ4282 | Congruent |
| Larvae | PGBAL115-19 | <i>Chironominae</i> | <i>Chironomus luridus</i> | BOLD:AAJ4282 | Congruent |
| Larvae | PGBAL152-19 | <i>Chironominae</i> | <i>Chironomus luridus</i> | BOLD:AAJ4282 | Congruent |
| Larvae | PGBAL153-19 | <i>Chironominae</i> | <i>Chironomus luridus</i> | BOLD:AAJ4282 | Congruent |
| Larvae | PGBAL156-19 | <i>Chironominae</i> | <i>Chironomus luridus</i> | BOLD:AAJ4282 | Congruent |
| Larvae | PGBAL158-19 | <i>Chironominae</i> | <i>Chironomus luridus</i> | BOLD:AAJ4282 | Congruent |
| Larvae | PGBAL187-19 | <i>Chironominae</i> | <i>Chironomus luridus</i> | BOLD:AAJ4282 | Congruent |
| Larvae | PGBAL268-19 | <i>Chironominae</i> | <i>Chironomus luridus</i> | BOLD:AAJ4282 | Congruent |
| Larvae | PGBAL270-19 | <i>Chironominae</i> | <i>Chironomus luridus</i> | BOLD:AAJ4282 | Congruent |

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| Larvae | PGBAL271-19 | <i>Chironominae</i> | <i>Chironomus luridus</i> | BOLD:AAJ4282 | Congruent |
| Larvae | PGBAL273-19 | <i>Chironominae</i> | <i>Chironomus luridus</i> | BOLD:AAJ4282 | Congruent |
| Larvae | PGBAL274-19 | <i>Chironominae</i> | <i>Chironomus luridus</i> | BOLD:AAJ4282 | Congruent |
| Larvae | PGBAL275-19 | <i>Chironominae</i> | <i>Chironomus luridus</i> | BOLD:AAJ4282 | Congruent |
| Larvae | PGBAL278-19 | <i>Chironominae</i> | <i>Chironomus luridus</i> | BOLD:AAJ4282 | Congruent |
| Larvae | PGBAL283-19 | <i>Chironominae</i> | <i>Chironomus luridus</i> | BOLD:AAJ4282 | Congruent |
| Larvae | PGBAL379-19 | <i>Chironominae</i> | <i>Chironomus luridus</i> | BOLD:AAJ4282 | Congruent |
| Larvae | PGBAL394-19 | <i>Chironominae</i> | <i>Chironomus luridus</i> | BOLD:AAJ4282 | Congruent |
| Larvae | PGBAL124-19 | <i>Chironominae</i> | <i>Chironomus plumosus</i> | BOLD:AAU2239 | Chironomidae |
| Larvae | PGBAL218-19 | <i>Chironominae</i> | <i>Chironomus plumosus</i> | BOLD:AAU2239 | Chironomidae |
| Larvae | PGBAL291-19 | <i>Chironominae</i> | <i>Chironomus plumosus</i> | BOLD:AAU2239 | Chironomidae |
| Larvae | CHBAL122-20 | <i>Chironominae</i> | <i>Chironomus pseudothummi</i> | BOLD:AAU4044 | Chironomidae |
| Larvae | CHBAL123-20 | <i>Chironominae</i> | <i>Chironomus pseudothummi</i> | BOLD:AAU4044 | Chironomidae |
| Larvae | PGBAL284-19 | <i>Chironominae</i> | <i>Chironomus pseudothummi</i> | BOLD:AAU4044 | Chironomidae |
| Larvae | CHBAL188-20 | <i>Chironominae</i> | <i>Chironomus pseudothummi</i> | BOLD:AAU4044 | Congruent |
| Larvae | PGBAL281-19 | <i>Chironominae</i> | <i>Chironomus pseudothummi</i> | BOLD:AAU4044 | Congruent |
| Larvae | CHBAL111-20 | <i>Chironominae</i> | <i>Chironomus riparius</i> | BOLD:AAA7263 | Congruent |
| Larvae | CHBAL112-20 | <i>Chironominae</i> | <i>Chironomus riparius</i> | BOLD:AAA7263 | Congruent |
| Larvae | CHBAL113-20 | <i>Chironominae</i> | <i>Chironomus riparius</i> | BOLD:AAA7263 | Congruent |
| Larvae | PGBAL160-19 | <i>Chironominae</i> | <i>Chironomus riparius</i> | BOLD:AAA7263 | Congruent |
| Larvae | PGBAL167-19 | <i>Chironominae</i> | <i>Chironomus riparius</i> | BOLD:AAA7263 | Congruent |
| Larvae | PGBAL178-19 | <i>Chironominae</i> | <i>Chironomus riparius</i> | BOLD:AAA7263 | Congruent |
| Larvae | PGBAL210-19 | <i>Chironominae</i> | <i>Chironomus riparius</i> | BOLD:AAA7263 | Congruent |

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|--------|-------------|---------------------|----------------------------------|--------------|--------------|
| Larvae | PGBAL282-19 | <i>Chironominae</i> | <i>Chironomus riparius</i> | BOLD:AAA7263 | Congruent |
| Larvae | CHBAL125-20 | <i>Chironominae</i> | <i>Chironomus transvaalensis</i> | BOLD:AAW3995 | Chironomidae |
| Larvae | CHBAL126-20 | <i>Chironominae</i> | <i>Chironomus transvaalensis</i> | BOLD:AAW3995 | Chironomidae |
| Larvae | CHBAL127-20 | <i>Chironominae</i> | <i>Chironomus transvaalensis</i> | BOLD:AAW3995 | Chironomidae |
| Larvae | CHBAL128-20 | <i>Chironominae</i> | <i>Chironomus transvaalensis</i> | BOLD:AAW3995 | Chironomidae |
| Larvae | PGBAL155-19 | <i>Chironominae</i> | <i>Chironomus transvaalensis</i> | BOLD:AAW3995 | Chironomidae |
| Larvae | PGBAL269-19 | <i>Chironominae</i> | <i>Chironomus transvaalensis</i> | BOLD:AAW3995 | Chironomidae |
| Larvae | PGBAL272-19 | <i>Chironominae</i> | <i>Chironomus transvaalensis</i> | BOLD:AAW3995 | Chironomidae |
| Larvae | PGBAL154-19 | <i>Chironominae</i> | <i>Chironomus transvaalensis</i> | BOLD:AAW3995 | Congruent |
| Larvae | PGBAL157-19 | <i>Chironominae</i> | <i>Chironomus transvaalensis</i> | BOLD:AAW3995 | Congruent |
| Larvae | PGBAL277-19 | <i>Chironominae</i> | <i>Chironomus transvaalensis</i> | BOLD:AAW3995 | Congruent |
| Larvae | CHBAL055-20 | <i>Chironominae</i> | <i>Cladopelma edwardsi</i> | BOLD:ADA3687 | Congruent |
| Larvae | CHBAL056-20 | <i>Chironominae</i> | <i>Cladopelma edwardsi</i> | BOLD:ADA3687 | Congruent |
| Larvae | CHBAL057-20 | <i>Chironominae</i> | <i>Cladopelma edwardsi</i> | BOLD:ADA3687 | Congruent |
| Larvae | CHBAL058-20 | <i>Chironominae</i> | <i>Cladopelma edwardsi</i> | BOLD:ADA3687 | Congruent |
| Larvae | CHBAL059-20 | <i>Chironominae</i> | <i>Cladopelma edwardsi</i> | BOLD:ADA3687 | Congruent |
| Larvae | CHBAL060-20 | <i>Chironominae</i> | <i>Cladopelma edwardsi</i> | BOLD:ADA3687 | Congruent |
| Larvae | CHBAL061-20 | <i>Chironominae</i> | <i>Cladopelma edwardsi</i> | BOLD:ADA3687 | Congruent |

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|--------|-------------|---------------------|--|--------------|-----------------------------|
| Larvae | CHBAL062-20 | <i>Chironominae</i> | <i>Cladopelma edwardsi</i> | BOLD:ADA3687 | Congruent |
| Larvae | CHBAL063-20 | <i>Chironominae</i> | <i>Cladopelma edwardsi</i> | BOLD:ADA3687 | Congruent |
| Larvae | CHBAL064-20 | <i>Chironominae</i> | <i>Cladopelma edwardsi</i> | BOLD:ADA3687 | Congruent |
| Larvae | CHBAL065-20 | <i>Chironominae</i> | <i>Cladopelma edwardsi</i> | BOLD:ADA3687 | Congruent |
| Larvae | CHBAL066-20 | <i>Chironominae</i> | <i>Cladopelma edwardsi</i> | BOLD:ADA3687 | Congruent |
| Larvae | CHBAL067-20 | <i>Chironominae</i> | <i>Cladopelma edwardsi</i> | BOLD:ADA3687 | Congruent |
| Larvae | CHBAL068-20 | <i>Chironominae</i> | <i>Cladopelma edwardsi</i> | BOLD:ADA3687 | Congruent |
| Larvae | CHBAL069-20 | <i>Chironominae</i> | <i>Cladopelma edwardsi</i> | BOLD:ADA3687 | Congruent |
| Larvae | PGBAL202-19 | <i>Chironominae</i> | <i>Cladopelma edwardsi</i> | BOLD:ADA3687 | Congruent |
| Larvae | PGBAL263-19 | <i>Chironominae</i> | <i>Cladopelma edwardsi</i> | BOLD:ADA3687 | Congruent |
| Larvae | PGBAL267-19 | <i>Chironominae</i> | <i>Cladopelma edwardsi</i> | BOLD:ADA3687 | Congruent |
| Larvae | PGBAL285-19 | <i>Chironominae</i> | <i>Cladopelma edwardsi</i> | BOLD:ADA3687 | Congruent |
| Larvae | PGBAL297-19 | <i>Chironominae</i> | <i>Cladopelma edwardsi</i> | BOLD:ADA3687 | Congruent |
| Larvae | PGBAL139-19 | <i>Chironominae</i> | <i>Cladopelma virescens</i> | BOLD:AAV8096 | Congruent |
| Larvae | PGBAL140-19 | <i>Chironominae</i> | <i>Cladopelma virescens</i> | BOLD:AAV8096 | Congruent |
| Larvae | PGBAL201-19 | <i>Chironominae</i> | <i>Cladopelma virescens</i> | BOLD:AAV8096 | Congruent |
| Larvae | PGBAL293-19 | <i>Chironominae</i> | <i>Cladopelma virescens</i> | | Congruent |
| Larvae | PGBAL331-19 | <i>Chironominae</i> | <i>Cladopelma virescens</i> | BOLD:AAV8096 | Congruent |
| Pupae | PGBAL446-19 | <i>Chironominae</i> | <i>Cladopelma virescens</i> | BOLD:AAV8096 | Congruent |
| Larvae | PGBAL296-19 | <i>Chironominae</i> | <i>Cladotanytarsus mancus</i> | BOLD:ACR8609 | Congruent |
| Larvae | PGBAL125-19 | <i>Chironominae</i> | <i>Cryptochironomus supplicans</i> | BOLD:ADF0941 | <i>Cryptochironomus sp.</i> |
| Larvae | PGBAL206-19 | <i>Chironominae</i> | <i>Cryptochironomus supplicans</i> | BOLD:ADF0941 | <i>Cryptochironomus sp.</i> |
| Larvae | PGBAL292-19 | <i>Chironominae</i> | <i>Cryptochironomus supplicans</i> | BOLD:ADF0941 | <i>Cryptochironomus sp.</i> |
| Larvae | PGBAL127-19 | <i>Chironominae</i> | <i>Dicrotendipes nervosus</i> | BOLD:AAU1021 | Congruent |

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|--------|-------------|---------------------|--|--------------|---------------------------|
| Larvae | PGBAL143-19 | <i>Chironominae</i> | <i>Dicrotendipes nervosus</i> | BOLD:AAU1021 | Congruent |
| Larvae | PGBAL204-19 | <i>Chironominae</i> | <i>Dicrotendipes nervosus</i> | BOLD:AAU1021 | Congruent |
| Larvae | PGBAL259-19 | <i>Chironominae</i> | <i>Dicrotendipes nervosus</i> | BOLD:AAU1021 | Congruent |
| Larvae | PGBAL260-19 | <i>Chironominae</i> | <i>Dicrotendipes nervosus</i> | BOLD:AAU1021 | Congruent |
| Larvae | PGBAL309-19 | <i>Chironominae</i> | <i>Dicrotendipes nervosus</i> | BOLD:AAU1021 | Congruent |
| Larvae | PGBAL330-19 | <i>Chironominae</i> | <i>Dicrotendipes nervosus</i> | BOLD:AAU1021 | Congruent |
| Pupae | PGBAL454-19 | <i>Chironominae</i> | <i>Dicrotendipes nervosus</i> | BOLD:AAU1021 | Congruent |
| Larvae | PGBAL362-19 | <i>Chironominae</i> | <i>Endochironomus tendens</i> | BOLD:AAW5643 | <i>Endochironomus sp.</i> |
| Larvae | PGBAL131-19 | <i>Chironominae</i> | <i>Glyptotendipes pallens</i> | BOLD:AEA9069 | Congruent |
| Larvae | CHBAL084-20 | <i>Chironominae</i> | <i>Kiefferulus tendipediformis</i> | BOLD:AEB0983 | Congruent |
| Larvae | CHBAL085-20 | <i>Chironominae</i> | <i>Kiefferulus tendipediformis</i> | BOLD:AEB0983 | Congruent |
| Larvae | CHBAL086-20 | <i>Chironominae</i> | <i>Kiefferulus tendipediformis</i> | BOLD:AEB0983 | Congruent |
| Larvae | CHBAL087-20 | <i>Chironominae</i> | <i>Kiefferulus tendipediformis</i> | BOLD:AAW4677 | Congruent |
| Larvae | CHBAL088-20 | <i>Chironominae</i> | <i>Kiefferulus tendipediformis</i> | BOLD:AAW4677 | Congruent |
| Larvae | CHBAL089-20 | <i>Chironominae</i> | <i>Kiefferulus tendipediformis</i> | BOLD:AAW4677 | Congruent |
| Larvae | CHBAL090-20 | <i>Chironominae</i> | <i>Kiefferulus tendipediformis</i> | BOLD:AAW4677 | Congruent |
| Larvae | CHBAL091-20 | <i>Chironominae</i> | <i>Kiefferulus tendipediformis</i> | BOLD:AAW4677 | Congruent |
| Larvae | CHBAL092-20 | <i>Chironominae</i> | <i>Kiefferulus tendipediformis</i> | BOLD:AAW4677 | Congruent |

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|--------|-------------|---------------------|------------------------------------|--------------|-----------|
| Larvae | CHBAL093-20 | <i>Chironominae</i> | <i>Kiefferulus tendipediformis</i> | BOLD:AAW4677 | Congruent |
| Larvae | CHBAL094-20 | <i>Chironominae</i> | <i>Kiefferulus tendipediformis</i> | BOLD:AAW4677 | Congruent |
| Larvae | PGBAL132-19 | <i>Chironominae</i> | <i>Kiefferulus tendipediformis</i> | BOLD:AEB0983 | Congruent |
| Larvae | PGBAL149-19 | <i>Chironominae</i> | <i>Kiefferulus tendipediformis</i> | BOLD:AEB0983 | Congruent |
| Larvae | PGBAL276-19 | <i>Chironominae</i> | <i>Kiefferulus tendipediformis</i> | BOLD:AAW4677 | Congruent |
| Larvae | PGBAL326-19 | <i>Chironominae</i> | <i>Kiefferulus tendipediformis</i> | BOLD:AEB0983 | Congruent |
| Larvae | PGBAL392-19 | <i>Chironominae</i> | <i>Kiefferulus tendipediformis</i> | BOLD:AEB0983 | Congruent |
| Larvae | PGBAL393-19 | <i>Chironominae</i> | <i>Kiefferulus tendipediformis</i> | | Congruent |
| Larvae | PGBAL396-19 | <i>Chironominae</i> | <i>Kiefferulus tendipediformis</i> | BOLD:AEB0983 | Congruent |
| Larvae | PGBAL126-19 | <i>Chironominae</i> | <i>Microchironomus tener</i> | BOLD:AAX4146 | Congruent |
| Larvae | PGBAL207-19 | <i>Chironominae</i> | <i>Microchironomus tener</i> | BOLD:AAX4146 | Congruent |
| Larvae | PGBAL208-19 | <i>Chironominae</i> | <i>Microchironomus tener</i> | BOLD:AAX4146 | Congruent |
| Larvae | PGBAL209-19 | <i>Chironominae</i> | <i>Microchironomus tener</i> | BOLD:AAX4146 | Congruent |
| Larvae | PGBAL302-19 | <i>Chironominae</i> | <i>Microchironomus tener</i> | BOLD:AAX4146 | Congruent |
| Larvae | PGBAL318-19 | <i>Chironominae</i> | <i>Microchironomus tener</i> | BOLD:AAX4146 | Congruent |
| Larvae | PGBAL319-19 | <i>Chironominae</i> | <i>Microchironomus tener</i> | BOLD:AAX4146 | Congruent |
| Larvae | PGBAL320-19 | <i>Chironominae</i> | <i>Microchironomus tener</i> | BOLD:AAX4146 | Congruent |
| Larvae | PGBAL323-19 | <i>Chironominae</i> | <i>Microchironomus tener</i> | BOLD:AAX4146 | Congruent |
| Larvae | PGBAL324-19 | <i>Chironominae</i> | <i>Microchironomus tener</i> | BOLD:AAX4146 | Congruent |

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|--------|-------------|---------------------|----------------------------------|--------------|-----------|
| Larvae | CHBAL081-20 | <i>Chironominae</i> | <i>Micropsectra atrofasciata</i> | BOLD:AAD4167 | Congruent |
| Larvae | CHBAL082-20 | <i>Chironominae</i> | <i>Micropsectra atrofasciata</i> | BOLD:AAD4167 | Congruent |
| Larvae | PGCBG087-20 | <i>Chironominae</i> | <i>Micropsectra lindrothi</i> | BOLD:AAD1527 | Congruent |
| Larvae | PGBAL179-19 | <i>Chironominae</i> | <i>Micropsectra pallidula</i> | BOLD:AAC7552 | Congruent |
| Pupae | PGBAL451-19 | <i>Chironominae</i> | <i>Microtendipes</i> | BOLD:ACY5270 | Congruent |
| Larvae | CHBAL070-20 | <i>Chironominae</i> | <i>Microtendipes</i> | BOLD:ADV8152 | Congruent |
| Larvae | CHBAL071-20 | <i>Chironominae</i> | <i>Microtendipes</i> | BOLD:ADV8152 | Congruent |
| Larvae | CHBAL072-20 | <i>Chironominae</i> | <i>Microtendipes</i> | BOLD:ADV8152 | Congruent |
| Larvae | CHBAL073-20 | <i>Chironominae</i> | <i>Microtendipes</i> | BOLD:ADV8152 | Congruent |
| Larvae | CHBAL159-20 | <i>Chironominae</i> | <i>Microtendipes</i> | BOLD:ADV8152 | Congruent |
| Larvae | CHBAL160-20 | <i>Chironominae</i> | <i>Microtendipes</i> | BOLD:ADV8152 | Congruent |
| Larvae | CHBAL161-20 | <i>Chironominae</i> | <i>Microtendipes</i> | BOLD:ADV8152 | Congruent |
| Larvae | CHBAL162-20 | <i>Chironominae</i> | <i>Microtendipes</i> | BOLD:ADV8152 | Congruent |
| Larvae | CHBAL163-20 | <i>Chironominae</i> | <i>Microtendipes</i> | BOLD:ADV8152 | Congruent |
| Larvae | PGBAL174-19 | <i>Chironominae</i> | <i>Microtendipes</i> | BOLD:ADV8152 | Congruent |
| Larvae | PGBAL345-19 | <i>Chironominae</i> | <i>Microtendipes</i> | BOLD:ADV8152 | Congruent |
| Larvae | PGBAL346-19 | <i>Chironominae</i> | <i>Microtendipes</i> | BOLD:ADV8152 | Congruent |
| Larvae | PGBAL365-19 | <i>Chironominae</i> | <i>Microtendipes</i> | BOLD:ADV8152 | Congruent |
| Larvae | CHBAL074-20 | <i>Chironominae</i> | <i>Microtendipes pedellus</i> | BOLD:ACR0263 | Congruent |
| Larvae | CHBAL158-20 | <i>Chironominae</i> | <i>Microtendipes pedellus</i> | BOLD:AEC1338 | Congruent |
| Larvae | PGBAL351-19 | <i>Chironominae</i> | <i>Microtendipes pedellus</i> | BOLD:ACR0263 | Congruent |
| Larvae | PGBAL176-19 | <i>Chironominae</i> | <i>Paracladopelma</i> | BOLD:ACT9115 | Congruent |
| Larvae | PGBAL227-19 | <i>Chironominae</i> | <i>Paracladopelma</i> | BOLD:ACT9115 | Congruent |
| Larvae | PGBAL400-19 | <i>Chironominae</i> | <i>Paracladopelma</i> | BOLD:ACT9115 | Congruent |
| Larvae | PGBAL213-19 | <i>Chironominae</i> | <i>Paratanytarsus dissimilis</i> | BOLD:AAE3697 | Congruent |

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| Larvae | PGBAL368-19 | <i>Chironominae</i> | <i>Paratanytarsus grimmii</i> | BOLD:AAD1485 | Congruent |
| Larvae | CHBAL130-20 | <i>Chironominae</i> | <i>Paratanytarsus lauterborni</i> | BOLD:AAL3267 | Congruent |
| Larvae | PGBAL173-19 | <i>Chironominae</i> | <i>Paratanytarsus lauterborni</i> | BOLD:AAL3267 | Congruent |
| Larvae | PGBAL401-19 | <i>Chironominae</i> | <i>Paratanytarsus lauterborni</i> | BOLD:AAL3267 | Congruent |
| Larvae | PGCBG077-20 | <i>Chironominae</i> | <i>Paratanytarsus lauterborni</i> | BOLD:AAL3267 | Congruent |
| Larvae | CHBAL044-20 | <i>Chironominae</i> | <i>Paratendipes albimanus</i> | BOLD:AAO1037 | Congruent |
| Larvae | CHBAL045-20 | <i>Chironominae</i> | <i>Paratendipes albimanus</i> | BOLD:AAO1037 | Congruent |
| Larvae | CHBAL046-20 | <i>Chironominae</i> | <i>Paratendipes albimanus</i> | BOLD:AAO1037 | Congruent |
| Larvae | CHBAL047-20 | <i>Chironominae</i> | <i>Paratendipes albimanus</i> | BOLD:AAO1037 | Congruent |
| Larvae | CHBAL048-20 | <i>Chironominae</i> | <i>Paratendipes albimanus</i> | | Congruent |
| Larvae | CHBAL049-20 | <i>Chironominae</i> | <i>Paratendipes albimanus</i> | BOLD:AAO1037 | Congruent |
| Larvae | CHBAL050-20 | <i>Chironominae</i> | <i>Paratendipes albimanus</i> | BOLD:AAO1037 | Congruent |
| Larvae | CHBAL051-20 | <i>Chironominae</i> | <i>Paratendipes albimanus</i> | BOLD:AAO1037 | Congruent |
| Larvae | CHBAL052-20 | <i>Chironominae</i> | <i>Paratendipes albimanus</i> | BOLD:AAO1037 | Congruent |
| Larvae | CHBAL053-20 | <i>Chironominae</i> | <i>Paratendipes albimanus</i> | BOLD:AAO1037 | Congruent |
| Larvae | CHBAL054-20 | <i>Chironominae</i> | <i>Paratendipes albimanus</i> | BOLD:AAO1037 | Congruent |
| Larvae | CHBAL175-20 | <i>Chironominae</i> | <i>Paratendipes albimanus</i> | BOLD:AAO1037 | Congruent |
| Larvae | CHBAL176-20 | <i>Chironominae</i> | <i>Paratendipes albimanus</i> | BOLD:AAO1037 | Congruent |
| Larvae | CHBAL177-20 | <i>Chironominae</i> | <i>Paratendipes albimanus</i> | BOLD:AAO1037 | Congruent |
| Larvae | CHBAL178-20 | <i>Chironominae</i> | <i>Paratendipes albimanus</i> | BOLD:AAO1037 | Congruent |
| Larvae | CHBAL179-20 | <i>Chironominae</i> | <i>Paratendipes albimanus</i> | BOLD:AAO1037 | Congruent |
| Larvae | CHBAL180-20 | <i>Chironominae</i> | <i>Paratendipes albimanus</i> | BOLD:AAO1037 | Congruent |
| Larvae | CHBAL181-20 | <i>Chironominae</i> | <i>Paratendipes albimanus</i> | BOLD:AAO1037 | Congruent |
| Larvae | PGBAL171-19 | <i>Chironominae</i> | <i>Paratendipes albimanus</i> | BOLD:AAO1037 | Congruent |

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| Larvae | PGBAL172-19 | <i>Chironominae</i> | <i>Paratendipes albimanus</i> | BOLD:AAO1037 | Congruent |
| Larvae | PGBAL175-19 | <i>Chironominae</i> | <i>Paratendipes albimanus</i> | BOLD:AAO1037 | Congruent |
| Larvae | PGBAL183-19 | <i>Chironominae</i> | <i>Paratendipes albimanus</i> | BOLD:AAO1037 | Congruent |
| Larvae | PGBAL186-19 | <i>Chironominae</i> | <i>Paratendipes albimanus</i> | | Congruent |
| Larvae | PGBAL258-19 | <i>Chironominae</i> | <i>Paratendipes albimanus</i> | BOLD:AAO1037 | Congruent |
| Larvae | PGBAL390-19 | <i>Chironominae</i> | <i>Paratendipes albimanus</i> | BOLD:AAO1037 | Congruent |
| Larvae | PGBAL399-19 | <i>Chironominae</i> | <i>Paratendipes albimanus</i> | BOLD:AAO1037 | Congruent |
| Larvae | PGBAL404-19 | <i>Chironominae</i> | <i>Paratendipes albimanus</i> | BOLD:AAO1037 | Congruent |
| Larvae | PGBAL342-19 | <i>Chironominae</i> | <i>Phaenopsectra flavipes</i> | BOLD:AAU2481 | Congruent |
| Larvae | PGBAL347-19 | <i>Chironominae</i> | <i>Phaenopsectra flavipes</i> | BOLD:AAU2481 | Congruent |
| Larvae | PGBAL366-19 | <i>Chironominae</i> | <i>Phaenopsectra flavipes</i> | BOLD:AAU2481 | Congruent |
| Larvae | PGBAL376-19 | <i>Chironominae</i> | <i>Phaenopsectra flavipes</i> | BOLD:AAU2481 | Congruent |
| Larvae | PGBAL377-19 | <i>Chironominae</i> | <i>Phaenopsectra flavipes</i> | BOLD:AAU2481 | Congruent |
| Larvae | CHBAL075-20 | <i>Chironominae</i> | <i>Polypedilum</i> | BOLD:ADT5870 | Congruent |
| Larvae | CHBAL076-20 | <i>Chironominae</i> | <i>Polypedilum</i> | BOLD:ADT5870 | Congruent |
| Larvae | CHBAL077-20 | <i>Chironominae</i> | <i>Polypedilum</i> | BOLD:ADT5870 | Congruent |
| Larvae | CHBAL078-20 | <i>Chironominae</i> | <i>Polypedilum</i> | BOLD:ADT5870 | Congruent |
| Larvae | PGBAL144-19 | <i>Chironominae</i> | <i>Polypedilum</i> | BOLD:ACR0701 | Congruent |
| Larvae | PGBAL146-19 | <i>Chironominae</i> | <i>Polypedilum</i> | BOLD:ADT5870 | Congruent |
| Larvae | PGBAL385-19 | <i>Chironominae</i> | <i>Polypedilum</i> | BOLD:ADT5870 | Congruent |
| Larvae | PGBAL353-19 | <i>Chironominae</i> | <i>Polypedilum</i> | BOLD:ACR0701 | Congruent |
| Larvae | CHBAL193-20 | <i>Chironominae</i> | <i>Polypedilum albicorne</i> | BOLD:AAL0178 | Congruent |
| Larvae | CHBAL194-20 | <i>Chironominae</i> | <i>Polypedilum albicorne</i> | | Congruent |
| Larvae | CHBAL129-20 | <i>Chironominae</i> | <i>Polypedilum convictum</i> | BOLD:AAW4661 | Congruent |
| Larvae | PGBAL312-19 | <i>Chironominae</i> | <i>Polypedilum nubeculosum</i> | BOLD:AAY3395 | Chironomidae |
| Larvae | PGBAL217-19 | <i>Chironominae</i> | <i>Polypedilum nubeculosum</i> | BOLD:AAY3395 | Congruent |

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| Larvae | PGBAL316-19 | <i>Chironominae</i> | <i>Polypedilum nubeculosum</i> | BOLD:AAV3395 | Congruent |
| Larvae | PGBAL328-19 | <i>Chironominae</i> | <i>Polypedilum nubeculosum</i> | BOLD:AAV3395 | Congruent |
| Pupae | PGBAL452-19 | <i>Chironominae</i> | <i>Polypedilum nubeculosum</i> | BOLD:AAV3395 | Congruent |
| Larvae | PGCBG079-20 | <i>Chironominae</i> | <i>Polypedilum nubeculosum</i> | BOLD:AAV3395 | Congruent |
| Larvae | CHBAL079-20 | <i>Chironominae</i> | <i>Polypedilum scalaenum</i> | BOLD:ACP4052 | Congruent |
| Larvae | PGBAL313-19 | <i>Chironominae</i> | <i>Polypedilum scalaenum</i> | BOLD:ACP4052 | Congruent |
| Larvae | PGBAL369-19 | <i>Chironominae</i> | <i>Polypedilum scalaenum</i> | BOLD:ACP4052 | Congruent |
| Larvae | PGBAL384-19 | <i>Chironominae</i> | <i>Polypedilum scalaenum</i> | BOLD:ACP4052 | Congruent |
| Larvae | PGBAL280-19 | <i>Chironominae</i> | <i>Procladius</i> | BOLD:ACT6620 | Congruent |
| Larvae | PGBAL300-19 | <i>Chironominae</i> | <i>Procladius</i> | BOLD:ACW5385 | Congruent |
| Larvae | PGBAL338-19 | <i>Chironominae</i> | <i>Procladius</i> | BOLD:ACW5385 | Congruent |
| Larvae | PGBAL314-19 | <i>Chironominae</i> | <i>Tanytarsus chinyensis</i> | BOLD:AAP5875 | Congruent |
| Larvae | PGCBG078-20 | <i>Chironominae</i> | <i>Tanytarsus ejuncidus</i> | | Congruent |
| Larvae | CHBAL131-20 | <i>Chironominae</i> | <i>Tanytarsus excavatus</i> | BOLD:AAV8401 | Congruent |
| Larvae | CHBAL132-20 | <i>Chironominae</i> | <i>Tanytarsus excavatus</i> | BOLD:AAV8401 | Congruent |
| Larvae | PGBAL141-19 | <i>Chironominae</i> | <i>Tanytarsus excavatus</i> | BOLD:AAV8401 | Congruent |
| Pupae | PGBAL453-19 | <i>Chironominae</i> | <i>Tanytarsus excavatus</i> | BOLD:AAV8401 | Congruent |
| Larvae | PGBAL395-19 | <i>Chironominae</i> | <i>Tanytarsus usmaensis</i> | BOLD:AAP7166 | Congruent |
| Larvae | PGBAL341-19 | <i>Orthocladinae</i> | <i>Cricotopus</i> | BOLD:ACQ9824 | Congruent |
| Larvae | CHBAL105-20 | <i>Orthocladinae</i> | <i>Cricotopus bicinctus</i> | BOLD:AAI6018 | Chironomidae |
| Larvae | CHBAL099-20 | <i>Orthocladinae</i> | <i>Cricotopus bicinctus</i> | BOLD:AAI6018 | Congruent |
| Larvae | CHBAL100-20 | <i>Orthocladinae</i> | <i>Cricotopus bicinctus</i> | BOLD:AAI6018 | Congruent |
| Larvae | CHBAL101-20 | <i>Orthocladinae</i> | <i>Cricotopus bicinctus</i> | BOLD:AAI6018 | Congruent |
| Larvae | CHBAL102-20 | <i>Orthocladinae</i> | <i>Cricotopus bicinctus</i> | | Congruent |

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| Larvae | CHBAL103-20 | <i>Orthocladinae</i> | <i>Cricotopus bicinctus</i> | BOLD:AAI6018 | Congruent |
| Larvae | CHBAL104-20 | <i>Orthocladinae</i> | <i>Cricotopus bicinctus</i> | BOLD:AAI6018 | Congruent |
| Larvae | CHBAL142-20 | <i>Orthocladinae</i> | <i>Cricotopus bicinctus</i> | BOLD:AAI6018 | Congruent |
| Larvae | CHBAL144-20 | <i>Orthocladinae</i> | <i>Cricotopus bicinctus</i> | | Congruent |
| Larvae | PGBAL221-19 | <i>Orthocladinae</i> | <i>Cricotopus bicinctus</i> | BOLD:AAI6018 | Congruent |
| Larvae | PGBAL352-19 | <i>Orthocladinae</i> | <i>Cricotopus bicinctus</i> | BOLD:AAI6018 | Congruent |
| Larvae | PGBAL354-19 | <i>Orthocladinae</i> | <i>Cricotopus bicinctus</i> | BOLD:AAI6018 | Congruent |
| Larvae | PGBAL356-19 | <i>Orthocladinae</i> | <i>Cricotopus bicinctus</i> | BOLD:AAI6018 | Congruent |
| Larvae | PGBAL339-19 | <i>Orthocladinae</i> | <i>Cricotopus similis</i> | BOLD:ACP9613 | Congruent |
| Larvae | CHBAL097-20 | <i>Orthocladinae</i> | <i>Cricotopus sylvestris</i> | BOLD:AAA5299 | <i>Cricotopus sp.</i> |
| Larvae | CHBAL098-20 | <i>Orthocladinae</i> | <i>Cricotopus sylvestris</i> | BOLD:AAA5299 | <i>Cricotopus sp.</i> |
| Larvae | CHBAL145-20 | <i>Orthocladinae</i> | <i>Cricotopus trifascia</i> | BOLD:AAU2576 | Congruent |
| Larvae | PGBAL148-19 | <i>Orthocladinae</i> | <i>Cricotopus trifascia</i> | BOLD:AAU2576 | Congruent |
| Larvae | CHBAL152-20 | <i>Orthocladinae</i> | <i>Orthocladius pedestris</i> | BOLD:AEB2231 | Congruent |
| Larvae | PGBAL355-19 | <i>Orthocladinae</i> | <i>Tvetenia calvescens</i> | BOLD:AAG1011 | Congruent |
| Larvae | PGBAL386-19 | <i>Prodiamesinae</i> | <i>Prodiamesa olivacea</i> | BOLD:AAD7458 | Congruent |
| Larvae | PGBAL147-19 | <i>Tanypodinae</i> | <i>Ablabesmyia longistyla</i> | BOLD:AAM5707 | Congruent |
| Larvae | PGBAL164-19 | <i>Tanypodinae</i> | <i>Ablabesmyia longistyla</i> | BOLD:AAM5707 | Congruent |
| Larvae | PGBAL162-19 | <i>Tanypodinae</i> | <i>Apsectrotanypus trifascipennis</i> | BOLD:ACD1957 | Congruent |
| Larvae | PGBAL405-19 | <i>Tanypodinae</i> | <i>Clinotanypus nervosus</i> | BOLD:ADC7811 | Chironomidae |
| Larvae | PGBAL122-19 | <i>Tanypodinae</i> | <i>Clinotanypus nervosus</i> | BOLD:AEB4947 | Congruent |
| Larvae | PGBAL128-19 | <i>Tanypodinae</i> | <i>Clinotanypus nervosus</i> | BOLD:AEB4947 | Congruent |
| Larvae | PGBAL129-19 | <i>Tanypodinae</i> | <i>Clinotanypus nervosus</i> | BOLD:AEB4947 | Congruent |
| Larvae | PGBAL134-19 | <i>Tanypodinae</i> | <i>Clinotanypus nervosus</i> | BOLD:AEB4947 | Congruent |
| Larvae | PGBAL136-19 | <i>Tanypodinae</i> | <i>Clinotanypus nervosus</i> | BOLD:AEB4947 | Congruent |
| Larvae | PGBAL214-19 | <i>Tanypodinae</i> | <i>Clinotanypus nervosus</i> | BOLD:AEB4947 | Congruent |
| Larvae | PGBAL294-19 | <i>Tanypodinae</i> | <i>Clinotanypus nervosus</i> | BOLD:AEB4947 | Congruent |

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| Larvae | PGBAL304-19 | <i>Tanypodinae</i> | <i>Clinotanypus nervosus</i> | BOLD:AEB4947 | Congruent |
| Larvae | PGBAL305-19 | <i>Tanypodinae</i> | <i>Clinotanypus nervosus</i> | BOLD:AEB4947 | Congruent |
| Larvae | PGBAL306-19 | <i>Tanypodinae</i> | <i>Clinotanypus nervosus</i> | BOLD:AEB4947 | Congruent |
| Larvae | PGBAL307-19 | <i>Tanypodinae</i> | <i>Clinotanypus nervosus</i> | BOLD:AEB4947 | Congruent |
| Larvae | PGBAL317-19 | <i>Tanypodinae</i> | <i>Clinotanypus nervosus</i> | BOLD:AEB4947 | Congruent |
| Larvae | PGBAL321-19 | <i>Tanypodinae</i> | <i>Clinotanypus nervosus</i> | BOLD:AEB4947 | Congruent |
| Larvae | PGBAL325-19 | <i>Tanypodinae</i> | <i>Clinotanypus nervosus</i> | BOLD:AEB4947 | Congruent |
| Larvae | PGBAL329-19 | <i>Tanypodinae</i> | <i>Clinotanypus nervosus</i> | BOLD:AEB4947 | Congruent |
| Pupae | PGBAL443-19 | <i>Tanypodinae</i> | <i>Clinotanypus nervosus</i> | BOLD:AEB4947 | Congruent |
| Larvae | PGBAL343-19 | <i>Tanypodinae</i> | <i>Macropelopia johnseni</i> | BOLD:ADL2054 | Chironomidae |
| Larvae | PGBAL118-19 | <i>Tanypodinae</i> | <i>Macropelopia nebulosa</i> | BOLD:AAX3566 | Congruent |
| Larvae | PGBAL145-19 | <i>Tanypodinae</i> | <i>Macropelopia nebulosa</i> | BOLD:AAX3566 | Congruent |
| Larvae | PGBAL163-19 | <i>Tanypodinae</i> | <i>Macropelopia nebulosa</i> | BOLD:AAX3566 | Congruent |
| Larvae | PGBAL182-19 | <i>Tanypodinae</i> | <i>Macropelopia nebulosa</i> | BOLD:AAX3566 | Congruent |
| Larvae | PGBAL348-19 | <i>Tanypodinae</i> | <i>Macropelopia nebulosa</i> | BOLD:AAX3566 | Congruent |
| Larvae | PGBAL349-19 | <i>Tanypodinae</i> | <i>Macropelopia nebulosa</i> | BOLD:AAX3566 | Congruent |
| Larvae | PGBAL373-19 | <i>Tanypodinae</i> | <i>Macropelopia nebulosa</i> | BOLD:AAX3566 | Congruent |
| Larvae | PGBAL406-19 | <i>Tanypodinae</i> | <i>Macropelopia nebulosa</i> | BOLD:AAX3566 | Congruent |
| Larvae | PGBAL410-19 | <i>Tanypodinae</i> | <i>Macropelopia nebulosa</i> | BOLD:AAX3566 | Congruent |
| Larvae | PGBAL413-19 | <i>Tanypodinae</i> | <i>Macropelopia nebulosa</i> | BOLD:AAX3566 | Congruent |
| Larvae | PGBAL409-19 | <i>Tanypodinae</i> | <i>Macropelopia notata</i> | BOLD:AAC1445 | Congruent |
| Larvae | PGBAL123-19 | <i>Tanypodinae</i> | <i>Procladius</i> | BOLD:ACW5385 | Congruent |
| Larvae | PGBAL130-19 | <i>Tanypodinae</i> | <i>Procladius</i> | BOLD:ACW5385 | Congruent |
| Larvae | PGBAL133-19 | <i>Tanypodinae</i> | <i>Procladius</i> | BOLD:ACW5385 | Congruent |
| Larvae | PGBAL135-19 | <i>Tanypodinae</i> | <i>Procladius</i> | BOLD:ACW5385 | Congruent |
| Larvae | PGBAL137-19 | <i>Tanypodinae</i> | <i>Procladius</i> | BOLD:ACW5385 | Congruent |
| Larvae | PGBAL138-19 | <i>Tanypodinae</i> | <i>Procladius</i> | BOLD:ACW5385 | Congruent |
| Larvae | PGBAL142-19 | <i>Tanypodinae</i> | <i>Procladius</i> | BOLD:ACW5385 | Congruent |

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| Larvae | PGBAL211-19 | <i>Tanypodinae</i> | <i>Procladius</i> | BOLD:ACW5385 | Congruent |
| Larvae | PGBAL216-19 | <i>Tanypodinae</i> | <i>Procladius</i> | BOLD:ACW5385 | Congruent |
| Larvae | PGBAL220-19 | <i>Tanypodinae</i> | <i>Procladius</i> | BOLD:ACW5385 | Congruent |
| Larvae | PGBAL264-19 | <i>Tanypodinae</i> | <i>Procladius</i> | BOLD:ACW5385 | Congruent |
| Larvae | PGBAL289-19 | <i>Tanypodinae</i> | <i>Procladius</i> | BOLD:ACW5385 | Congruent |
| Larvae | PGBAL301-19 | <i>Tanypodinae</i> | <i>Procladius</i> | BOLD:ACW5385 | Congruent |
| Larvae | PGBAL310-19 | <i>Tanypodinae</i> | <i>Procladius</i> | BOLD:ACW5385 | Congruent |
| Larvae | PGBAL327-19 | <i>Tanypodinae</i> | <i>Procladius</i> | BOLD:ACW5385 | Congruent |
| Larvae | PGBAL332-19 | <i>Tanypodinae</i> | <i>Procladius</i> | BOLD:ACW5385 | Congruent |
| Larvae | PGBAL333-19 | <i>Tanypodinae</i> | <i>Procladius</i> | BOLD:ACW5385 | Congruent |
| Larvae | PGBAL334-19 | <i>Tanypodinae</i> | <i>Procladius</i> | BOLD:ACW5385 | Congruent |
| Larvae | PGBAL335-19 | <i>Tanypodinae</i> | <i>Procladius</i> | BOLD:ACW5385 | Congruent |
| Larvae | PGBAL336-19 | <i>Tanypodinae</i> | <i>Procladius</i> | BOLD:ACW5385 | Congruent |
| Larvae | PGBAL402-19 | <i>Tanypodinae</i> | <i>Procladius</i> | BOLD:ACW5385 | Congruent |
| Pupae | PGBAL444-19 | <i>Tanypodinae</i> | <i>Procladius</i> | BOLD:ACW5385 | Congruent |
| Pupae | PGBAL445-19 | <i>Tanypodinae</i> | <i>Procladius</i> | BOLD:ACW5385 | Congruent |
| Pupae | PGBAL447-19 | <i>Tanypodinae</i> | <i>Procladius</i> | BOLD:ACW5385 | Congruent |
| Pupae | PGBAL449-19 | <i>Tanypodinae</i> | <i>Procladius</i> | BOLD:ACW5385 | Congruent |
| Larvae | CHBAL096-20 | <i>Tanypodinae</i> | <i>Procladius</i> | BOLD:ACT6620 | Congruent |
| Larvae | PGBAL389-19 | <i>Tanypodinae</i> | <i>Procladius</i> | BOLD:ACT6620 | Congruent |
| Larvae | PGBAL303-19 | <i>Tanypodinae</i> | <i>Procladius crassinervis</i> | BOLD:AAG5487 | Congruent |
| Pupae | PGBAL192-19 | <i>Tanypodinae</i> | <i>Procladius culiciformis</i> | BOLD:AEB2521 | Congruent |
| Larvae | PGBAL266-19 | <i>Tanypodinae</i> | <i>Procladius culiciformis</i> | BOLD:AEB2521 | Congruent |
| Larvae | PGBAL315-19 | <i>Tanypodinae</i> | <i>Procladius culiciformis</i> | BOLD:AEB2521 | Congruent |
| Larvae | PGBAL337-19 | <i>Tanypodinae</i> | <i>Procladius culiciformis</i> | BOLD:AEB2521 | Congruent |
| Pupae | PGBAL448-19 | <i>Tanypodinae</i> | <i>Procladius culiciformis</i> | BOLD:AEB2521 | Congruent |
| Pupae | PGBAL450-19 | <i>Tanypodinae</i> | <i>Procladius culiciformis</i> | BOLD:AEB2521 | Congruent |
| Larvae | CHBAL107-20 | <i>Tanypodinae</i> | <i>Psectrotanypus varius</i> | BOLD:ACK3819 | Congruent |

| | | | | | |
|--------|-------------|--------------------|---------------------------------|--------------|--------------|
| Larvae | PGBAL279-19 | <i>Tanypodinae</i> | <i>Psectrotanypus varius</i> | BOLD:ACK3819 | Congruent |
| Larvae | CHBAL133-20 | <i>Tanypodinae</i> | <i>Rheopelopia maculipennis</i> | | Congruent |
| Larvae | PGBAL226-19 | <i>Tanypodinae</i> | <i>Tanypus</i> | BOLD:AEB0390 | Congruent |
| Larvae | PGBAL215-19 | Unidentified | <i>Chironomidae</i> | BOLD:AEB5540 | Chironomidae |
| Larvae | PGBAL412-19 | Unidentified | <i>Chironomidae</i> | BOLD:AEB4167 | Chironomidae |
| Larvae | CHBAL080-20 | Unidentified | <i>Chironomidae</i> | BOLD:AEB9338 | Congruent |
| Larvae | CHBAL083-20 | Unidentified | <i>Chironomidae</i> | BOLD:AEB7079 | Congruent |
| Larvae | CHBAL095-20 | Unidentified | <i>Chironomidae</i> | BOLD:AEB8733 | Congruent |
| Larvae | CHBAL106-20 | Unidentified | <i>Chironomidae</i> | BOLD:AEA1528 | Congruent |
| Larvae | CHBAL146-20 | Unidentified | <i>Chironomidae</i> | BOLD:AEB5540 | Congruent |
| Larvae | CHBAL147-20 | Unidentified | <i>Chironomidae</i> | BOLD:AEC1194 | Congruent |
| Larvae | CHBAL148-20 | Unidentified | <i>Chironomidae</i> | BOLD:AEB7413 | Congruent |
| Larvae | CHBAL149-20 | Unidentified | <i>Chironomidae</i> | BOLD:AEB8622 | Congruent |
| Larvae | CHBAL150-20 | Unidentified | <i>Chironomidae</i> | BOLD:AEB8622 | Congruent |
| Larvae | CHBAL151-20 | Unidentified | <i>Chironomidae</i> | BOLD:AEB8622 | Congruent |
| Larvae | CHBAL153-20 | Unidentified | <i>Chironomidae</i> | BOLD:AEB7235 | Congruent |
| Larvae | CHBAL154-20 | Unidentified | <i>Chironomidae</i> | BOLD:AEB1619 | Congruent |
| Larvae | CHBAL155-20 | Unidentified | <i>Chironomidae</i> | | Congruent |
| Larvae | CHBAL172-20 | Unidentified | <i>Chironomidae</i> | BOLD:AEB0777 | Congruent |
| Larvae | CHBAL173-20 | Unidentified | <i>Chironomidae</i> | BOLD:AEB0777 | Congruent |
| Larvae | CHBAL192-20 | Unidentified | <i>Chironomidae</i> | BOLD:AEB7222 | Congruent |
| Larvae | PGBAL119-19 | Unidentified | <i>Chironomidae</i> | BOLD:ADU1466 | Congruent |
| Larvae | PGBAL120-19 | Unidentified | <i>Chironomidae</i> | | Congruent |
| Larvae | PGBAL121-19 | Unidentified | <i>Chironomidae</i> | BOLD:AEB4592 | Congruent |
| Larvae | PGBAL150-19 | Unidentified | <i>Chironomidae</i> | BOLD:AEB0655 | Congruent |
| Larvae | PGBAL151-19 | Unidentified | <i>Chironomidae</i> | BOLD:AEB0655 | Congruent |
| Larvae | PGBAL159-19 | Unidentified | <i>Chironomidae</i> | BOLD:AEB4167 | Congruent |

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|--------|-------------|--------------|---------------------|--------------|-----------|
| Larvae | PGBAL161-19 | Unidentified | <i>Chironomidae</i> | BOLD:AEB6946 | Congruent |
| Larvae | PGBAL168-19 | Unidentified | <i>Chironomidae</i> | BOLD:AEA1528 | Congruent |
| Larvae | PGBAL169-19 | Unidentified | <i>Chironomidae</i> | BOLD:AEA1528 | Congruent |
| Larvae | PGBAL170-19 | Unidentified | <i>Chironomidae</i> | BOLD:AEA3018 | Congruent |
| Larvae | PGBAL177-19 | Unidentified | <i>Chironomidae</i> | BOLD:AEB7079 | Congruent |
| Larvae | PGBAL180-19 | Unidentified | <i>Chironomidae</i> | BOLD:AEA1528 | Congruent |
| Larvae | PGBAL181-19 | Unidentified | <i>Chironomidae</i> | BOLD:AEA9212 | Congruent |
| Larvae | PGBAL184-19 | Unidentified | <i>Chironomidae</i> | BOLD:ADS3982 | Congruent |
| Larvae | PGBAL185-19 | Unidentified | <i>Chironomidae</i> | BOLD:ADS3982 | Congruent |
| Pupae | PGBAL193-19 | Unidentified | <i>Chironomidae</i> | BOLD:AEB4038 | Congruent |
| Larvae | PGBAL203-19 | Unidentified | <i>Chironomidae</i> | BOLD:AEA9482 | Congruent |
| Larvae | PGBAL205-19 | Unidentified | <i>Chironomidae</i> | BOLD:ACU4730 | Congruent |
| Larvae | PGBAL222-19 | Unidentified | <i>Chironomidae</i> | BOLD:AEB4167 | Congruent |
| Larvae | PGBAL224-19 | Unidentified | <i>Chironomidae</i> | | Congruent |
| Larvae | PGBAL225-19 | Unidentified | <i>Chironomidae</i> | BOLD:AEA3018 | Congruent |
| Larvae | PGBAL340-19 | Unidentified | <i>Chironomidae</i> | BOLD:AEB5183 | Congruent |
| Larvae | PGBAL344-19 | Unidentified | <i>Chironomidae</i> | BOLD:AEB4038 | Congruent |
| Larvae | PGBAL350-19 | Unidentified | <i>Chironomidae</i> | BOLD:AEB1618 | Congruent |
| Larvae | PGBAL357-19 | Unidentified | <i>Chironomidae</i> | BOLD:ACU4730 | Congruent |
| Larvae | PGBAL358-19 | Unidentified | <i>Chironomidae</i> | BOLD:AEB1619 | Congruent |
| Larvae | PGBAL359-19 | Unidentified | <i>Chironomidae</i> | BOLD:AEB5540 | Congruent |
| Larvae | PGBAL360-19 | Unidentified | <i>Chironomidae</i> | BOLD:AEB5540 | Congruent |
| Larvae | PGBAL361-19 | Unidentified | <i>Chironomidae</i> | BOLD:ACU4730 | Congruent |
| Larvae | PGBAL364-19 | Unidentified | <i>Chironomidae</i> | BOLD:AEB3242 | Congruent |
| Larvae | PGBAL367-19 | Unidentified | <i>Chironomidae</i> | | Congruent |
| Larvae | PGBAL372-19 | Unidentified | <i>Chironomidae</i> | BOLD:AEB6946 | Congruent |
| Larvae | PGBAL374-19 | Unidentified | <i>Chironomidae</i> | BOLD:AEB0655 | Congruent |
| Larvae | PGBAL375-19 | Unidentified | <i>Chironomidae</i> | BOLD:AEB6946 | Congruent |

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|--------|-------------|--------------|---------------------|--------------|-----------|
| Larvae | PGBAL378-19 | Unidentified | <i>Chironomidae</i> | BOLD:AEB6946 | Congruent |
| Larvae | PGBAL380-19 | Unidentified | <i>Chironomidae</i> | BOLD:AEB1196 | Congruent |
| Larvae | PGBAL381-19 | Unidentified | <i>Chironomidae</i> | BOLD:AEB0655 | Congruent |
| Larvae | PGBAL382-19 | Unidentified | <i>Chironomidae</i> | BOLD:AEB0655 | Congruent |
| Larvae | PGBAL383-19 | Unidentified | <i>Chironomidae</i> | BOLD:AEB1196 | Congruent |
| Larvae | PGBAL403-19 | Unidentified | <i>Chironomidae</i> | BOLD:ADS3982 | Congruent |
| Larvae | PGBAL407-19 | Unidentified | <i>Chironomidae</i> | BOLD:ADS3982 | Congruent |
| Larvae | PGBAL408-19 | Unidentified | <i>Chironomidae</i> | BOLD:ADU1466 | Congruent |
| Larvae | PGBAL411-19 | Unidentified | <i>Chironomidae</i> | BOLD:AEB0777 | Congruent |
| Larvae | PGBAL414-19 | Unidentified | <i>Chironomidae</i> | BOLD:AEB6494 | Congruent |
| Larvae | PGBAL415-19 | Unidentified | <i>Chironomidae</i> | BOLD:AEB0777 | Congruent |
| Larvae | PGBAL416-19 | Unidentified | <i>Chironomidae</i> | BOLD:AEB0776 | Congruent |
| Larvae | PGBAL417-19 | Unidentified | <i>Chironomidae</i> | BOLD:ADU1466 | Congruent |
| Larvae | PGBAL418-19 | Unidentified | <i>Chironomidae</i> | BOLD:AEB3186 | Congruent |

Table S2. Checklist of species from Skadar Lake basin.

| | Genus species | Author | Stadium | Number of sequences |
|----|---------------------------------------|---|----------------|----------------------------|
| 1 | <i>Ablabesmyia longistyla</i> | Fittkau, 1962 | L, A | 4 |
| 2 | <i>Ablabesmyia monilis</i> | Linnaeus, 1758 | A | 3 |
| 3 | <i>Apsectrotanypus trifascipennis</i> | Zetterstedt, 1838 | L | 1 |
| 4 | <i>Benthalia carbonaria</i> | Meigen 1804 | L | 11 |
| 5 | <i>Bryophaenocladus nigrus</i> | Albu 1974 | A | 1 |
| 6 | <i>Cardiocladius capucinus</i> | Zetterstedt, 1850 | A | 2 |
| 7 | <i>Chaetocladius perennis</i> | Meigen, 1830 | A | 1 |
| 8 | <i>Chironomus annularius</i> | Kieffer, 1926 | L, A | 5 |
| 9 | <i>Chironomus aprilinus</i> | Meigen, 1830 | L | 2 |
| 10 | <i>Chironomus cingulatus</i> | Meigen, 1830 | A | 1 |
| 11 | <i>Chironomus curabilis</i> | Beljanina, Sigareva & Loginova, 1990 | A | 6 |
| 12 | <i>Chironomus luridus</i> | Strenzke, 1959 | L | 26 |
| 13 | <i>Chironomus plumosus</i> | Linnaeus, 1758 | L, A | 15 |
| 14 | <i>Chironomus pseudomendax</i> | Wülker, 1999 | A | 2 |
| 15 | <i>Chironomus pseudothummi</i> | Strenzke, 1959 | L, A | 21 |
| 16 | <i>Chironomus riparius</i> | Meigen, 1804 | L | 8 |
| 17 | <i>Chironomus transvaalensis</i> | Kieffer, 1923 | L | 10 |
| 18 | <i>Cladopelma edwardsi</i> | Kruseman 1933 | L, A | 22 |
| 19 | <i>Cladopelma virescens</i> | Meigen, 1818 | L, P, A | 12 |
| 20 | <i>Cladotanytarsus mancus</i> | Walker, 1856 | L, A | 13 |
| 21 | <i>Clinotanypus nervosus</i> | Meigen, 1818 | L, P, A | 21 |

| | | | | |
|----|---|-------------------|---------|----|
| 22 | <i>Conchapelopia pallidula</i> | Meigen, 1818 | A | 1 |
| 23 | <i>Corynoneura gratias</i> | Schlee, 1968 | A | 6 |
| 24 | <i>Cricotopus bicinctus</i> | Meigen, 1818 | L, A | 18 |
| 25 | <i>Cricotopus fuscus</i> | Kieffer, 1909 | A | 2 |
| 26 | <i>Cricotopus maurii</i> | Schlee, 1968 | A | 1 |
| 27 | <i>Cricotopus relucens</i> | Hirvenoja, 1973 | A | 5 |
| 28 | <i>Cricotopus rufiventris</i> | Meigen, 1830 | A | 2 |
| 29 | <i>Cricotopus similis</i> | Goetghebuer, 1921 | L | 1 |
| 30 | <i>Cricotopus sylvestris</i> | Fabricius, 1794 | L, A | 17 |
| 31 | <i>Cricotopus trifascia</i> | Edwards, 1929 | L, A | 3 |
| 32 | <i>Cryptochironomus albofasciatus</i> | Staeger, 1839 | A | 1 |
| 33 | <i>Cryptochironomus supplicans</i> | Meigen, 1830 | L, A | 13 |
| 34 | <i>Dicrotendipes lobiger</i> | Kieffer, 1921 | A | 2 |
| 35 | <i>Dicrotendipes nervosus</i> | Staeger, 1839 | L, P, A | 12 |
| 36 | <i>Dicrotendipes pulsus</i> | Walker, 1856 | A | 4 |
| 37 | <i>Endochironomus albipennis</i> | Meigen, 1830 | A | 8 |
| 38 | <i>Endochironomus tendens</i> | Fabricius, 1775 | L, A | 5 |
| 39 | <i>Glyptotendipes pallens</i> | Meigen, 1804 | L, A | 15 |
| 40 | <i>Glyptotendipes signatus</i> | Kieffer, 1909 | A | 2 |
| 41 | <i>Guttipelopia guttipennis</i> | Wulp, 1861 | A | 3 |
| 42 | <i>Kiefferulus tendipediformis</i> | Goetghebuer, 1921 | L, A | 26 |
| 43 | <i>Limnophyes minimus</i> | Meigen, 1818 | A | 7 |
| 44 | <i>Limnophyes natalensis</i> | Kieffer, 1914 | A | 14 |
| 45 | <i>Limnophyes pentaplastus</i> | Kieffer, 1921 | A | 1 |

| | | | | |
|----|---------------------------------------|-------------------|------|----|
| 46 | <i>Macropelopia johnseni</i> | Thienemann, 1916 | L | 1 |
| 47 | <i>Macropelopia nebulosa</i> | Meigen, 1804 | L | 10 |
| 48 | <i>Macropelopia notata</i> | Meigen, 1818 | L | 1 |
| 49 | <i>Microchironomus tener</i> | Kieffer, 1918 | L, A | 19 |
| 50 | <i>Micropsectra atrofasciata</i> | Kieffer, 1911 | L | 2 |
| 51 | <i>Micropsectra lindrothi</i> | Goetghebuer, 1931 | L | 2 |
| 52 | <i>Micropsectra pallidula</i> | Meigen, 1830 | L | 1 |
| 53 | <i>Microtendipes chloris</i> | Meigen, 1818 | A | 2 |
| 54 | <i>Microtendipes pedellus</i> | de Geer, 1776 | L, A | 5 |
| 55 | <i>Orthocladius oblidens</i> | Walker, 1856 | A | 1 |
| 56 | <i>Orthocladius pedestris</i> | Kieffer, 1909 | L, A | 4 |
| 57 | <i>Parachironomus monochromus</i> | Wulp, 1874 | A | 6 |
| 58 | <i>Paratanytarsus bituberculatus</i> | Edwards, 1929 | A | 6 |
| 59 | <i>Paratanytarsus dissimilis</i> | Johannsen, 1905 | L, A | 10 |
| 60 | <i>Paratanytarsus grimmii</i> | Schneider, 1885 | L | 1 |
| 61 | <i>Paratanytarsus inopertus</i> | Walker, 1856 | A | 1 |
| 62 | <i>Paratanytarsus laetipes</i> | Zetterstedt, 1850 | A | 5 |
| 63 | <i>Paratanytarsus lauterborni</i> | Kieffer, 1909 | L, A | 5 |
| 64 | <i>Paratanytarsus tenellulus</i> | Goetghebuer, 1921 | A | 1 |
| 65 | <i>Paratendipes albimanus</i> | Meigen, 1818 | L, A | 29 |
| 66 | <i>Phaenopsectra flavipes</i> | Meigen, 1818 | L, A | 9 |
| 67 | <i>Phaenopsectra punctipes</i> | Wiedemann, 1817 | A | 4 |

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|----|-----------------------------------|---|---------|----|
| 68 | <i>Polypedilum absensilobum</i> | Zhang, Ruilei, Song, Chao, Qi, Xin & Wang, Xinhua, 2016 | A | 1 |
| 69 | <i>Polypedilum albicorne</i> | Meigen, 1838 | L | 2 |
| 70 | <i>Polypedilum convictum</i> | Walker, 1856 | L | 1 |
| 71 | <i>Polypedilum cultellatum</i> | Goetghebuer, 1931 | A | 1 |
| 72 | <i>Polypedilum laetum</i> | Meigen, 1818 | A | 1 |
| 73 | <i>Polypedilum nubeculosum</i> | Meigen, 1804 | L, P, A | 21 |
| 74 | <i>Polypedilum pedestre</i> | Meigen, 1830 | A | 1 |
| 75 | <i>Polypedilum scalaenum</i> | Schrank, 1803 | L, A | 18 |
| 76 | <i>Polypedilum sordens</i> | Wulp, 1874 | A | 5 |
| 77 | <i>Procladius crassinervis</i> | Zetterstedt, 1838 | L, A | 3 |
| 78 | <i>Procladius culiciformis</i> | Linnaeus, 1767 | L, P, A | 16 |
| 79 | <i>Prodiamesa olivacea</i> | Meigen, 1818 | L | 1 |
| 80 | <i>Psectrocladius limbatellus</i> | Holmgren, 1869 | A | 6 |
| 81 | <i>Psectrotanypus varius</i> | Fabricius, 1787 | L | 2 |
| 82 | <i>Pseudosmittia trilobata</i> | Edwards, 1929 | A | 1 |
| 83 | <i>Rheocricotopus chalybeatus</i> | Edwards, 1929 | A | 1 |
| 84 | <i>Rheopelopia maculipennis</i> | Zetterstedt, 1838 | L | 1 |
| 85 | <i>Stempellina bausei</i> | Kieffer, 1911 | A | 2 |
| 86 | <i>Stenochironomus gibbus</i> | Fabricius, 1794 | A | 2 |
| 87 | <i>Stictochironomus pictulus</i> | Meigen, 1830 | A | 1 |
| 88 | <i>Tanypus punctipennis</i> | Meigen, 1818 | A | 1 |
| 89 | <i>Tanytarsus brundini</i> | Lindeberg, 1963 | A | 2 |
| 90 | <i>Tanytarsus chinyensis</i> | Goetghebuer, 1934 | L, A | 6 |

| | | | | |
|----|------------------------------|-------------------|---------|----|
| 91 | <i>Tanytarsus ejuncidus</i> | Walker, 1856 | L, A | 6 |
| 92 | <i>Tanytarsus excavatus</i> | Edwards, 1929 | L, P, A | 11 |
| 93 | <i>Tanytarsus inaequalis</i> | Goetghebuer, 1921 | A | 1 |
| 94 | <i>Tanytarsus lactescens</i> | Edwards, 1929 | A | 1 |
| 95 | <i>Tanytarsus striatulus</i> | Lindeberg, 1976 | A | 1 |
| 96 | <i>Tanytarsus usmaensis</i> | Pagast, 1931 | L, A | 6 |
| 97 | <i>Tvetenia calvescens</i> | Edwards, 1929 | L | 1 |

Legend: L – larvae; P – pupae; A – adult.

Table S3. Summary statistics on intra and interspecific distances.

| Subfamily | Distance | Min. | 1st Qu. | Median | Mean | 3rd Qu. | Max. |
|------------------|---------------|--------|---------|--------|--------|---------|--------|
| BOLD + Skadar | Intraspecific | 0.0000 | 0.0000 | 0.0017 | 0.0071 | 0.0052 | 0.2612 |
| | Interspecific | 0.0000 | 0.1753 | 0.1962 | 0.1971 | 0.2172 | 0.3762 |
| Skadar | Intraspecific | 0.0000 | 0.0017 | 0.0064 | 0.0151 | 0.0151 | 0.1752 |
| | Interspecific | 0.0330 | 0.1769 | 0.1954 | 0.1955 | 0.2145 | 0.3030 |
| Podonominae | Intraspecific | 0.0000 | 0.0000 | 0.0015 | 0.0084 | 0.0015 | 0.0448 |
| | Interspecific | 0.1611 | 0.1920 | 0.2078 | 0.2003 | 0.2124 | 0.2390 |
| Telmatogetoninae | Intraspecific | 0.0000 | 0.0069 | 0.0139 | 0.0092 | 0.0139 | 0.0139 |
| | Interspecific | 0.1819 | 0.1869 | 0.1978 | 0.1949 | 0.2007 | 0.2091 |
| Prodiamesinae | Intraspecific | 0.0000 | 0.0015 | 0.0030 | 0.0113 | 0.0063 | 0.1215 |
| | Interspecific | 0.0624 | 0.1407 | 0.1481 | 0.1493 | 0.1626 | 0.1743 |
| Diamesinae | Intraspecific | 0.0000 | 0.0051 | 0.0086 | 0.0087 | 0.0122 | 0.1387 |
| | Interspecific | 0.0000 | 0.0844 | 0.0945 | 0.1024 | 0.1144 | 0.2147 |
| Chironominae | Intraspecific | 0.0000 | 0.0000 | 0.0024 | 0.0051 | 0.0051 | 0.2264 |
| | Interspecific | 0.0000 | 0.1724 | 0.1888 | 0.1893 | 0.2059 | 0.3240 |
| Orthocladinae | Intraspecific | 0.0000 | 0.0000 | 0.0017 | 0.0075 | 0.0052 | 0.2612 |
| | Interspecific | 0.0000 | 0.1649 | 0.1794 | 0.1799 | 0.1947 | 0.3499 |
| Tanypodinae | Intraspecific | 0.0000 | 0.0015 | 0.0146 | 0.0409 | 0.0838 | 0.2101 |
| | Interspecific | 0.0071 | 0.1511 | 0.1648 | 0.1627 | 0.1789 | 0.2497 |

Table S4. Ambiguous identification of DNA barcodes.

| Subfamily | Barcode 1 identification | Barcode 2 identification | Barcode 3 identification |
|---------------|---|--|------------------------------------|
| Chironominae | <i>Micropsectra junci</i> | <i>Micropsectra apposita</i> (=M. <i>contracta</i> ; see Discussion, <i>The Micropsectra Genus</i>) | |
| | <i>Polypedilum tridens</i> | <i>Polypedilum bicrenatum</i> | |
| | <i>Chironomus heteropilicornis</i> | <i>Chironomus pilicornis</i> | |
| | <i>Microtendipes brevitarsis</i> | <i>Microtendipes pedellus</i> | |
| | <i>Sergentia baueri</i> | <i>Sergentia prima</i> | |
| | <i>Dicrotendipes modestus</i> | <i>Dicrotendipes pulsus</i> | |
| | <i>Chironomus pseudothummi</i> | <i>Chironomus riparius</i> | |
| Orthocladinae | <i>Gymnometriocnemus kamimegavirgus</i> | <i>Gymnometriocnemus volitans</i> | |
| | <i>Cricotopus glacialis</i> | <i>Cricotopus sylvestris</i> | |
| | <i>Heterotrissocladus brundini</i> | <i>Heterotrissocladus grimshawi</i> | <i>Heterotrissocladus marcidus</i> |
| | <i>Psectrocladius octomaculatus</i> | <i>Psectrocladius psilopterus</i> | |
| Diamesinae | <i>Diamesa bohemani</i> | <i>Diamesa zernyi</i> | |
| | <i>Diamesa hyperborea</i> | <i>Diamesa tonsa</i> | |

Table S5. Chironomidae included in the minimum-spanning haplotype networks analysis.

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|----------------------------------|
| <i>Cricotopus</i> group 1 |
| <i>C. lestralis</i> |
| <i>C. polaris</i> |
| <i>C. gelidus</i> |
| <i>C pilosellus</i> |
| <i>Cricotopus</i> group 2 |
| <i>C. sylvestris</i> |
| <i>C. glacialis</i> |
| <i>C. trifasciatus</i> |
| <i>C. pilitarsis</i> |
| <i>C. maurii</i> |
| <i>C. ornatus</i> |
| <i>C relucens</i> |
| <i>Chironomus</i> |
| <i>C. pseudomendax</i> |
| <i>C. tentans</i> |
| <i>C. pallidivittatus</i> |
| <i>C. melanescens</i> |
| <i>C. sollicitus</i> |
| <i>C. riparius</i> |
| <i>C. pseudothummi</i> |
| <i>C. lugubris</i> |
| <i>C. luridus</i> |
| <i>C. aprilinus</i> |

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| <i>C. salinarius</i> |
| <i>C. pilicornis</i> |
| <i>C. heteropilicornis</i> |
| <i>C. obtusidens</i> |
| <i>C. storai</i> |
| <i>C. mendax</i> |
| <i>C. curabilis</i> |
| <i>C. plumosus</i> |
| <i>C. melanotus</i> |
| <i>C. cingulatus</i> |
| <i>C. annularius</i> |
| <i>C. longistylus</i> |
| <i>C. hyperboreus</i> |
| <i>C. acerbus</i> |
| Diamesa |
| <i>D. starmachi</i> |
| <i>D. serratosioi</i> |
| <i>D. saetheri</i> |
| <i>D. lavillei</i> |
| <i>D. arctica</i> |
| <i>D. incallida</i> |
| <i>D. lindrothi</i> |
| <i>D. latitarsis</i> |
| <i>D. tonsa</i> |
| <i>D. hyperborea</i> |

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| <i>D. zernyi</i> |
| <i>D. bohemani</i> |
| <i>D. insignipes</i> |
| <i>D. bertrami</i> |
| <i>Micropsectra</i> |
| <i>M. attenuata</i> |
| <i>M. seguyi</i> |
| <i>M. roseiventris</i> |
| <i>M. radialis</i> |
| <i>M. pharetrophora</i> |
| <i>M. uliginosa</i> |
| <i>M. nana</i> |
| <i>M. chionophila</i> |
| <i>M. insignilobus</i> |
| <i>M. lindrothi</i> |
| <i>M. borealis</i> |
| <i>M. atrofasciata</i> |
| <i>M. pallidula</i> |
| <i>M. lacustris</i> |
| <i>M. notescens</i> |
| <i>M. junci</i> |
| <i>M. contracta</i> |
| <i>M. sofiae</i> |
| <i>M. schrankelae</i> |
| <i>M. logani</i> |

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| <i>M. klinki</i> |
| <i>M. recurvata</i> |
| <i>M. appendica</i> |
| <i>M. styriaca</i> |
| <i>M. acuta</i> |
| <i>Polypedilum</i> |
| <i>P. laetum</i> |
| <i>P. nubeculosum</i> |
| <i>P. arundineti</i> |
| <i>P. trigonus</i> |
| <i>P. uncinatum</i> |
| <i>P. sordens</i> |
| <i>P. convictum</i> |
| <i>P. cultellatum</i> |
| <i>P. pullum</i> |
| <i>P. albinodus</i> |
| <i>P. tritum</i> |
| <i>P. pedestre</i> |
| <i>P. albicorne</i> |
| <i>P. tridens</i> |
| <i>P. bicrenatum</i> |
| <i>P. scalaenum</i> |
| <i>P. simulans</i> |
| <i>P. quadriguttatum</i> |
| <i>P. tuberculum</i> |