

Issue 1/2012

Scientific papers published in October 2012

Every single month about 40-60 new scientific studies utilizing DNA-based identification, mostly DNA Barcoding, are published.

The Barcode Bulletin Reader's Digest is a monthly electronic newsletter intended to provide you with up to date information on new publications in the field sorted by the main topics of interest.

Pest control and invasive species detection

Abd-Rabou S, Shalaby H, Germain J-F, Ris N, Kreiter P, Malausa T (2012)

Identification of mealybug pest species (Hemiptera: Pseudococcidae) in Egypt and France, using a DNA barcoding approach. *Bulletin of Entomological Research* **102**: 515-523.

Correa MCG, Germain J-F, Malausa T, Zaviezo T (2012)

Molecular and morphological characterization of mealybugs (Hemiptera: Pseudococcidae) from Chilean vineyards. *Bulletin of Entomological Research* **102**: 524-530.

Ghahramanzadeh R, Esselink G, Kodde LP, Duistermaat H, van Valkenburg JLCH, Marashi SH, Smulders MJM, van de Wiel CCM (2012)

Efficient distinction of invasive aquatic plant species from non-invasive related species using DNA barcoding. *Molecular Ecology Resources* **early online**.

Health

Ander M, Troell K, Chirico J (2012)

Barcoding of biting midges in the genus *Culicoides*: a tool for species determination. *Medical and Veterinary Entomology* **early online**.

Levitz S, Standley CJ, Adriko M, Kabatereine NB, Stothard JR (2012)

Environmental epidemiology of intestinal schistosomiasis and genetic diversity of *Schistosoma mansoni* infections in snails at Bugoigo village, Lake Albert. *Acta Tropica* **early online**.

Socolovschi C, Pages F, Ndiath MO, Ratmanov P, Raoult D (2012)

Rickettsia Species in African Anopheles Mosquitoes. *PLoS ONE* **7**: e48254.

Wang G, Li C, Guo X, Xing D, Dong Y, Wang Z, Zhang Y, Liu M, Zheng Z, Zhang H, Zhu X, Wu Z, Zhao T (2012)

Identifying the Main Mosquito Species in China Based on DNA Barcoding. *PLoS ONE* **7**: e47051.

Conservation

Yessoufou K, Daru BH, Davies TJ (2012)

Phylogenetic Patterns of Extinction Risk in the Eastern Arc Ecosystems, an African Biodiversity Hotspot. *PLoS ONE* **7**: e47082.

Discovery

Elzinga JA, Chevasco V, Mappes J, Grapputo A (2012)

Low parasitism rates in parthenogenetic bagworm moths do not support the parasitoid hypothesis for sex.

Journal of Evolutionary Biology **online early**.

Gou HT, Guan GQ, Liu AH, Ma ML, Xu ZK, Liu ZJ, Ren QY, Li YQ, Yang JF, Chen Z, Yin H, Luo JX (2012)

A DNA barcode for Piroplasma. *Acta Tropica* **124**: 92-97.

Hendrixson BE, DeRussy BM, Hamilton CA, Bond JE (2012)

An exploration of species boundaries in turret-building tarantulas of the Mojave Desert (Araneae, Mygalomorphae, Theraphosidae, *Aphonopelma*). *Molecular Phylogenetics and Evolution* **online early**.

Knee W, Beaulieu F, Skevington JH, Kelso S, Cognato AI, Forbes MR (2012)

Species Boundaries and Host Range of Tortoise Mites (Uropodoidea) Phoretic on Bark Beetles (Scolytinae),

Using Morphometric and Molecular Markers. *PLoS ONE* **7**: e47243.

Knox MA, Hogg ID, Pilditch CA, Lörz AN, Hebert PDN, Steinke D (2012)

Mitochondrial DNA (COI) analyses reveal that amphipod diversity is associated with environmental heterogeneity in deep-sea habitats *Molecular Ecology* **21**: 4885–4897.

Kozol R, Blanco-Bercial L, Bucklin A (2012) Multi-Gene Analysis Reveals a Lack of Genetic Divergence between

Calanus agulhensis and *C. sinicus* (Copepoda; Calanoida). *PLoS ONE* **7**: e45710.

Lefoulon E, Gavotte L, Junker K, Barbuto M, Uni S, Landmann F, Laaksonen S, Saari S, Nikander S, de Souza

Lima S, Casiraghi M, Bain O, Martin C (2012)

A new type F *Wolbachia* from Splendidofiliariinae (Onchocercidae) supports the recent emergence of this supergroup.

International Journal for Parasitology **online early**.

Mutanen M, Hausmann A, Hebert PDN, Landry J-F, de Waard JR, Huemer P (2012)

Allopatry as a Gordian Knot for Taxonomists: Patterns of DNA Barcode Divergence in Arctic-Alpine Lepidoptera.

PLoS ONE **7**: e47214.

Slowik J, Blagoev GA (2012)

First description of the male spider *Paciphantes magnificus* (Chamberlin & Ivie) (Araneae: Linyphiidae).

Zootaxa **3481**: 73-81.

Vervoort MTW, Vonk JA, Mooijman PJW, Van den Elsen SJJ, Van Megen HHB, Veenhuizen P, Landeweert

R, Bakker J, Mulder C, Helder J (2012)

SSU Ribosomal DNA-Based Monitoring of Nematode Assemblages Reveals Distinct Seasonal Fluctuations within Evolutionary Heterogeneous Feeding Guilds. *PLoS ONE* **7**: e47555.

Wubet T, Christ S, Schöning I, Boch S, Gawlich M, Schnabel B, Fischer M, Buscot F (2012)

Differences in Soil Fungal Communities between European Beech (*Fagus sylvatica* L.) Dominated Forests Are

Related to Soil and Understory Vegetation. *PLoS ONE* **7**: e47500.

Yang Z, Landry J-F, Handfield L, Zhang Y, Alma Solis M, Handfield D, Scholtens BG, Mutanen M, Nuss M,

Hebert PDN (2012)

DNA barcoding and morphology reveal three cryptic species of *Anania* (Lepidoptera: Crambidae: Pyraustinae) in

North America, all distinct from their European counterpart. *Systematic Entomology* **37**: 686-705.

Library

Aubriot X, Lowry PP, Cruaud C, Couloux A, Haevermans T (2012)

DNA barcoding in a biodiversity hot spot: potential value for the identification of Malagasy *Euphorbia* L. listed in CITES Appendices I and II. *Molecular Ecology Resources* **online early**.

Bergsten J, Bilton DT, Fujisawa T, Elliott M, Monaghan MT, Balke M, Hendrich L, Geijer J, Herrmann J, Foster GN, Ribera I, Nilsson AN, Barraclough TG, Vogler AP (2012)

The Effect of Geographical Scale of Sampling on DNA Barcoding. *Systematic Biology* **61**: 851-869.

Chen R, Jiang L-Y, Qiao G-X (2012) The Effectiveness of Three Regions in Mitochondrial Genome for Aphid DNA Barcoding: A Case in Lachninae. *PLoS ONE* **7**: e46190.

Cheng L, Chang YM, Lu CY, Cao DC, Sun XW (2012)

[DNA barcoding and species and subspecies classification within genus *Carassius*]. *Dongwuxue Yanjiu* **33**: 463-472.

de Oliveira Ribeiro A, Caires RA, Mariguela TC, Pereira LHG, Hanner R, Oliveira C (2012)

DNA barcodes identify marine fishes of São Paulo State, Brazil. *Molecular Ecology Resources* **12**: 1012-1020.

Kim S, Song K-H, Ree H-I, Kim W (2012)

A DNA barcode library for Korean Chironomidae (Insecta: Diptera) and indexes for defining barcode gap. *Molecules and Cells* **33**: 9-17.

León-Romero Y, Mejía O, Soto-Galera E (2012)

DNA barcoding reveals taxonomic conflicts in the *Herichthys bartoni* species group (Pisces: Cichlidae). *Molecular Ecology Resources* **12**: 1021-1026.

Magnacca KN, Brown MJF (2012) DNA barcoding a regional fauna: Irish solitary bees. *Molecular Ecology Resources* **12**: 990-998.

Ni L, Li Q, Kong L, Huang S, Li L (2012)

DNA barcoding and phylogeny in the family Mactridae (Bivalvia: Heterodonta): Evidence for cryptic species. *Biochemical Systematics and Ecology* **44**: 164-172.

Rakauskas R, Bašilova J (2012)

Barcoding of aphids (Hemiptera, Aphididae and Adelgidae): proper usage of the global data set. *Molecular Ecology Resources* **online early**.

Robe LJ, Machado S, Bartholomei-Santos ML (2012)

The DNA Barcoding and the Caveats with Respect to Its Application to Some Species of Palaemonidae (Crustacea, Decapoda). *Zoological Science* **29**: 714-724.

Rosso JJ, Mabragaña E, González Castro M, Díaz de Astarloa JM (2012)

DNA barcoding Neotropical fishes: recent advances from the Pampa Plain, Argentina. *Molecular Ecology Resources* **12**: 999-1011.

Wang Z-D, Guo Y-S, Liu X-M, Fan Y-B, Liu C-W (2012)

DNA barcoding South China Sea fishes. *Mitochondrial DNA* **23**: 405-410.

Library continued

Weis A, Melzer RR (2012)

How did sea spiders recolonize the Chilean fjords after glaciation? DNA barcoding of Pycnogonida, with remarks on phylogeography of *Achelia assimilis* (Haswell, 1885). *Systematics and Biodiversity* **10**: 361-374.

Zou S, Li Q, Kong L (2012)

Monophyly, Distance and Character-Based Multigene Barcoding Reveal Extraordinary Cryptic Diversity in *Nassarius*: A Complex and Dangerous Community. *PLoS ONE* **7**: e47276.

Methods

Andersen JC, Mills NJ (2012)

DNA Extraction from Museum Specimens of Parasitic Hymenoptera. *PLoS ONE* **7**: e45549.

Barbosa S, Pauperio J, Searle JB, Alves PC (2012)

Genetic identification of Iberian rodent species using both mitochondrial and nuclear loci: application to noninvasive sampling. *Molecular Ecology Resources* **online early**.

Nichols RV, Königsson H, Danell K, Spong G (2012) Browsed twig environmental DNA: diagnostic PCR to identify ungulate species. *Molecular Ecology Resources* **12**: 983-989.

Peterson S (2012)

Aspergillus and *Penicillium* identification using DNA sequences: barcode or MLST? *Applied Microbiology and Biotechnology* **95**: 339-344.

Informatics

Carneiro J, Pereira F, Amorim A (2012)

SPInDel: a multifunctional workbench for species identification using insertion/deletion variants. *Molecular Ecology Resources* **12**: 1190-1195.

Piry S, Guivier E, Realini A, Martin JF (2012)

|SE|S|AM|E| Barcode: NGS-oriented software for amplicon characterization – application to species and environmental barcoding. *Molecular Ecology Resources* **12**: 1151-1157.

Did we miss your publication? Do you want us to send this digest to any friends or colleagues? Do you have any other feedback? Please let us know

Contact dsteinke@uoguelph.ca (Dirk Steinke)