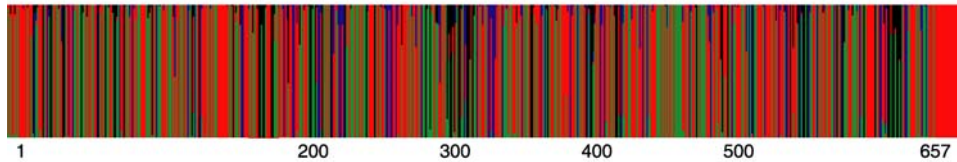
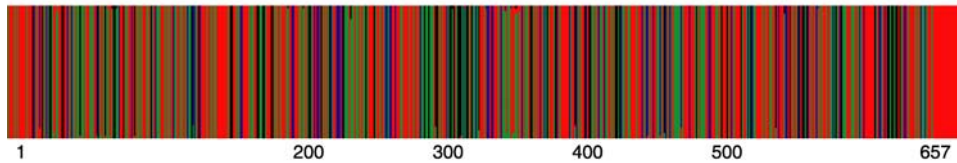
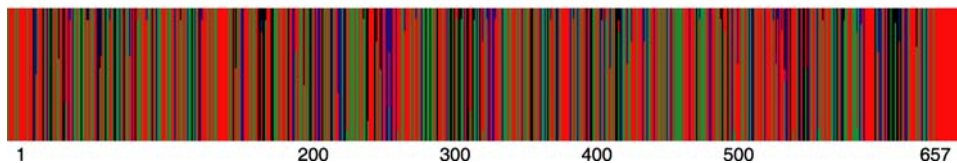


CO1 DNA Barcode Heterogeneity for Malagasy *Odontomachus*

■ A ■ T ■ G ■ C

*Odontomachus coquereli**Odontomachus troglodytes**Odontomachus simillimus*

**Figure 17. *Odontomachus* spp. CO1 DNA barcode heterogeneity.** *O. coquereli* (n=97), *O. troglodytes* (n=53) and *O. simillimus* (n=13). doi:10.1371/journal.pone.0001787.g017

Dzanga-Sangha, 12.7 km 326° NW Bayanga; Parc National Dzanga-Ndoki, Mabéa Bai, 21.4 km 53° NE Bayanga. **GABON:** Estuaire: Pointe Ngombe, Ekwata, 16 km 240° WSW Libreville; Libreville; F.C. Mondah, 21 km 331° NNW Libreville. **GABON:** Ogooue-Maritime: Aire d'Exploit. Rationnelle de Faune des Monts Doudou, 25.2 km 304° NW Doussala; Reserve de la Moukalaba-Dougoua, 12.2 km 305° NW Doussala; Reserve de Faune de la Moukalaba-Dougoua, 12.2 km 305° NW Doussala; Reserve de Faune de la Moukalaba-Dougoua, 10.8 km 214° SW Doussala; Woleu-Ntem: 31.3 km 108° ESE Minvoul; **KENYA:** [Côte d' Afrique or. angl. Shimoni; **LIBERIA:** Sapo Nat. Park. **MADAGASCAR: Toamasina:** Mahavelona (= Foulpointe); 5.3 km SSE Ambanizana, Andranobe; Forêt d'Analava Mandrissy, 5.9 km 195° Antanambe; Res. Ambodiriana, 4.8 km 306° Manompana, along Manompana river; Ile Sainte Marie, Forêt Ambohidena, 22.8 km 44° Ambodifotatra; Ile Sainte Marie, Forêt Ampanihy, 14.4 km 52° Ambodifotatra; Ile Sainte Marie, Forêt Kalalao, 9.9 km 34° Ambodifotatra; Parcelle K9 Tampolo; Tampolo; S.F. Tampolo, 10 km NNE Fenoarivo Atn.; Parcelle E3 Tampolo; Parcelle K7 Tampolo; Bridge at Onibi, NW of Mahavelona; Mahavelona (Foulpointe); 2.1 km 315° Mahavelona; Toamasina (Tamatave); Prison de Tamatave; Station forest de Tampolo, 10 km N Fenerive; Res. Betampona, Ambodiriana 45 km NW Toamasina; 10k N Brickaville; 11 km SE Ampasimanolotra (= Brickaville); **Fianarantsoa:** Riv: Ranomafana Aff. de laroka; Local: Ranomafana RN2; Riv: laroka Aff de Rianila; Local: Manakana; Riv: Mahatsara Aff de Rianila; Local: Piste vers Brickaville; Riv: Rongaronga; Local: Ambodifahao; Riv: Rianila (Ivohitra); Local: Antseranambe; Riv: Santaravina; Local: Ampasipotsy-pont routier;

Riv: Sandragiro; Local: Tanambao-Pont routier; Riv: Farimbogna; Local: Village 202 (Pont routier RN2); Riv: Ilazana; Local: Gri-gri; 8k E Kianjavato Vatovavy Forest; Ranomafana Nat. Park; 10k E Ranomafana; Ranomafana Nat. Park, 10 km E; Mananjary 2 km south; 7.6 km 122° Kianjavato, Forêt Classée Vatovavy; **SOUTH AFRICA: Mpumalanga:** Songimuelo Nat. Reserve, Kromdraai Camp, Komati River; **Natal:** Mtunzini; **Limpopo:** Dunstable Farm, 27 km E of Hoedspruit. **DEMOCRATIC REPUBLIC OF THE CONGO:** Stanleyville; Epulu.

## Complementary analyses to CO1

In some instances we chose to amplify independent nuclear markers to help interpret CO1 divergences involving populations where specimens were morphologically cryptic. Because of their high copy number and relatively conserved primer regions, we selected three ribosomal regions to amplify: 18S, 28S and ITS1. We had high expectations for the utility of these markers to complement the mtDNA barcode analysis based on our own experiences with other taxa [40,41], the utility of these markers in other taxonomic groups where, for instance, ITS1 functions as a barcode [42], and, for 28S, based on predictions of others for the utility of this region as an alternative barcode region [43]. Unfortunately, we found that, while the CO1 data from species with exclusively (putatively) ergatoid queens had large phylogeographic signal, when compared to the three rRNA regions we utilized it was markedly simpler to generate, interpret and analyze. The rRNA markers utilized here, particularly 18S and 28S, can be useful for identifying interspecific (species as revised here) hybridization [see 40,41,43].