Supplementary Information

Appendix I: Taxonomic implications

General comments

The only other phylogenomic study on the subgenus *Liolaemus* used hundreds of ultra-conserved elements but sparse taxonomic sampling of the group (16 taxa), and resolved most nodes with low support values (Panzera et al. 2017). Our results broadly agree with this study, but we find some important differences. Species that we infer as part of the *chiliensis* section (*L. cyanogaster*, *L. pictus* and *L. paulinae*), are intermixed with species of the *nigromaculatus* section in Panzera et al. (2017). These authors also inferred *L. atacamensis* as sister to *L. isabelae*, rather than to *L. nigromaculatus*, as resolved in our study and others (Troncoso-Palacios et al. 2015).

Our results support previous findings that the *alticolor-bibronii* group is polyphyletic (Panzera et al. 2017). The *alticolor-bibronii* group is mainly defined by shared morphological characters that include species from the *lemniscatus*, *fuscus*, *gravenhorstii*, *alticolor*, *bibronii* and *walkeri* groups (Quinteros 2013; Portelli and Quinteros 2018). These groups are not inferred as closely related based on our analyses, and the *walkeri* group is possibly not even part of the *Liolaemus* subgenus (Esquerré et al. 2019). A recent mtDNA tree recovers a well-supported clade containing the *alticolor* and *bibronii* groups (Esquerré et al. 2019), whereas here we recover these groups as part of relatively distantly related clades. Further, consistent with previous studies, we recover the species of the *alticolor*, *bibronii* and *gravenhorstii* groups as a well-supported clade, which we call here the *gravenhorstii-bibronii* complex (Schulte et al. 2000; Pyron et al. 2013; Portelli and Quinteros 2018; Esquerré et al. 2019).

Similarly, the placement of the *punmahuida* and *cristiani* groups is unresolved; both are placed equivocally as related to either the *elongatus-kriegi* or *gravenhorstii-bibronii* complexes. Further phylogenetic studies of *Liolaemus* (and other similar groups) should be prepared to accommodate introgression, hybrid speciation, gene duplication and loss and the resulting reticulation histories in their phylogenetic estimation.

L. kuhlmanni and *L. zapallarensis*

Liolaemus nigromaculatus kuhlmanni Muller & Hellmich 1933 was described from "Jalmel, Los Andes, central Chile" (Müller and Hellmich 1933), a locality that appears to not exist. Later, Donoso-Barros (1966) in a re-description corrects this to Jahuel, Los Andes, a locality found near San Felipe in the Andes mountains, but this is a very unlikely locality for this group of coastal lizards. This species was later elevated to full species (Ortiz 1981). In more recent years, *L. kuhlmanni* has been twice formally proposed as a junior synonym of *L. zapallarensis* Muller & Hellmich 1933 (Pincheira-Donoso and Núñez 2005; Demangel 2016), citing differences in their coloration patterns between the northern populations near La Serena, Coquimbo Region (*L. zapallarensis*) and southern populations near Concón, Valparaíso Region (*L. kuhlmanni*), and that these differences dissipate at intermediate localities. Nevertheless, both proposals were later rejected based on lack of supporting evidence for Pincheira-Donoso & Núñez (2016) (Lobo et al. 2010), and additionally based on lack of peer-review and proper scientific methodology for Demangel (2016) (Troncoso-Palacios et al. 2019). In this study, we included samples assigned to both species from an ample geographic range, including *L. kuhlmanni* from La Ligua, Valparaíso Region, and *L. zapallarensis* from Mantagua, Valparaiso Region and Isla Locos, Coquimbo Region (type locality subspecies *L. z. sieversi* Donoso-Barros 1954). These samples are part of the same

lineage and therefore should be regarded as conspecific. We formally relegate *L. kuhlmanni* as a junior synonym of *L. zapallarensis*.

L. nigrocoeruleus and *L. velosoi*

Liolaemus velosoi Ortiz 1987 was described from Cerro Imán in Copiapó, Atacama Region, Chile (Ortiz 1987). Years later, *L. josephorum* Núñez, Schulte & Garín was described from Diego de Almagro, Atacama Region, around 100 km north (Núñez et al. 2001), but was subsequently synonymized with *L. velosoi* (Pincheira-Donoso and Núñez 2005). This proposal was later rejected (Lobo et al. 2010), but eventually re-assessed and confirmed, making *L. josephorum* an invalid taxon (Troncoso-Palacios and Ferri-Yáñez 2012). *Liolaemus nigrocoeruleus* Marambio-Alfaro & Troncoso-Palacios 2014 was described from a locality close to Barranquilla, Atacama Region, roughly 20 km east of the type locality of *L. velosoi*, based mainly on differences in male coloration with related species *L. platei, L. velosoi* and *L. hellmichi* (Marambio-Alfaro and Troncoso-Palacios 2014). Here we find that populations assigned to *L. nigroceoruleus* are intermixed with populations of *L. velosoi*, therefore we relegate *L. nigrocoeruleus* as a junior synonym of *L. velosoi.* We also find strong evidence that the population from Diego de Almagro now assigned to *L. velosoi,* and formerly considered *L. josephorum,* forms an independent sister clade to the southern populations of *L. velosoi.* This calls for further species delimitation studies to determine if *L. josephorum* is a valid taxonomic entity. Finally, Demangel (2016) proposed *L. velosoi* as a synonym of *L. platei*, but this was rejected by Troncoso-Palacios et al. (2019) based on lack of peer-review and proper scientific methodology. In this study we find evidence that they are both independent taxa and *L. velosoi* is a valid species.

L. brattstroemi and *L. pictus*

Liolaemus cyanogaster brattstroemi Donoso-Barros 1961 was described from the forests around Lechagua, in the island of Chiloé, Chile (Donoso-Barros 1961a). Later, Pincheira-Donoso & Núñez (2005) elevated this taxon to full species based on the sympatry between *L. c. brattstroemi* and the nominal subspecies *L. c. cyanogaster* (Duméril & Bibron 1837), and proposed that *L. brattstroemi* is in fact more closely related to the also sympatric *L. pictus* (Duméril & Bibron 1837), based on morphological affinities. Demangel (2016) examined specimens in Lechagua and the original description of *L. brattstroemi,* and found that all morphological variation in *L. brattstroemi* is within the range of morphological variation within *L. pictus*, and proposed that *L. brattstroemi* is a junior synonym of *L. pictus.* This proposal was later rejected by Troncoso-Palacios et al. (2019) based on lack of peer-review and scientific methodology. Nevertheless, we find that samples identified as *L. brattstroemi* and as *L. pictus* from Chiloé are conspecific, therefore we formally relegate *L. brattstroemi* as a junior synonym of *L. pictus.* The phylogenetic relationships between populations assigned to *L. pictus* and related species are extremely complex and we fail to resolve them here. If the populations from Chiloé are eventually shown to be a distinct species, the name *L. chiloensis* Müller & Hellmich 1939 would be available.

L. riodamas and *L. thermarum*

Liolaemus thermarum Videla & Cei 1996 was described as a lizard lacking pre-cloacal pores from Baños de Azufre in the Andean Mendoza Province in Argentina, with a suggested affinity to *L. cristiani* Núñez, Navarro & Loyola 1991, *L. coeruleus* Cei & Ortiz-Zapata 1983 and *L. neuquensis* Müller & Hellmich 1939, as a group of lizards lacking precloacal pores (Videla and Cei 1996). Later, other authors sampled the same locality and assigned lizards to *L. thermarum*, but found these to have 2-3 precloacal pores, and resolved them as part of the

L. elongatus clade (Avila et al. 2010). These same authors noted that due to poor preservation of the type series of *L. thermarum,* and lack of details in the description, they misidentified samples they included as *L. thermarum* for what was actually the recently described *Liolaemus smaug* Abdala, Quinteros, Scrocchi & Stazzonelli 2010 (Avila et al. 2012); this led to confusion regarding the true identity of *L. thermarum*. Another species lacking pre-cloacal pores was later described: *L. riodamas* Esquerré, Núñez & Scolaro 2013 from Las Damas River in the Andes of the O'Higgins Region in Chile, just 30 km north of Baños del Azufre, based on a population originally assigned to *L. cf. ceii* (Núñez and Torres-Mura 1992). A new southern population was later discovered in El Planchón, Maule Region of Chile (Esquerré et al. 2016). In this paper, after sequencing specimens that match the locality and traits of *L. thermarum,* we find that *L. riodamas* and *L. thermarum* are conspecific. Therefore, we relegate *L. riodamas* as a junior synonym of *L. thermarum.*

The following groups require further study to resolve taxonomic issues, and so here we simply outline the existing and potential issues.

L. abdalai and *L. lemniscatus*

Liolaemus abdalai Quinteros 2012 was described from Neuquén in the Argentinean Patagonia (Quinteros 2012) from populations previously assigned to *L. lemniscatus* Gravenhorst 1838 (Donoso-Barros 1966; Cei 1986; Lobo and Abdala 2002). *Liolaemus abdalai* was assigned to the *alticolor-bibronii* group, but Quinteros noted that *L. lemniscatus* is the most morphologically similar species to *L. abdalai*. A combined approach using mtDNA and morphology places *L. abdalai* as part of the *L. bibronii* group (Portelli and Quinteros 2018), but a previous study had found using nDNA that *L. abdalai* falls outside this clade (Martínez 2012). Molecular data infer *L. lemniscatus* as part of the *nigromaculatus*

section, which suggests that *L. abdalai* is also part of this clade. Our sampling included *L. lemniscatus* from San Martin de Los Andes, in Neuquén, only 36 km from the type locality of *L. abdalai*. We initially believed these samples to be *L. abdalai* but close examination of the San Martin specimens revealed that their scale counts where more similar to what Quinteros (2012) reported for *L. lemniscatus*. If what was described as *L. abdalai* is actually conspecific with what is called *L. lemniscatus* in southern Chile and Argentina, then *L. abdalai* may be a junior synonym of *L. lemniscatus*. Alternatively, the southern populations of *L. lemniscatus* may be conspecific with *L. abdalai*, since our results show that southern and northern populations of *L. lemniscatus* form reciprocally monophyletic clades.

L. confusus and *L. curicensis*

Liolaemus confusus Núñez & Pincheira-Donoso 2006 was described from a restricted population found in Lolol, in the Costa Cordillera of Central Chile, from what was previously believed to be *L. monticola* Müller & Hellmich 1932, but *L. confusus* was diagnosed by morphological and karyotypic differences. Our mitochondrial trees recover *L. confusus* as part of *L. curicensis* Müller & Hellmich 1938, a close relative to *L. monticola*. However, since we do not have nuclear data for *L. confusus*, and find high levels of introgression and obvious morphological differences between this species and *L. curicensis,* we still consider it a valid taxon and recommend further studies using nuclear loci to clarify this issue.

L. melaniceps and *L. silvai*

Liolaemus silvai Ortiz 1989 was described from Carrizalillo (Ortiz 1989), Atacama Region, Chile, and *L. melaniceps* Pincheira-Donoso & Núñez 2005 was later described from the nearby Chungungo Island, only 25 km south (Pincheira-Donoso and Núñez 2005) and less than 2 km from the mainland. Our mtDNA recovers *L. melaniceps* as nested within *L. silvai*,

but our nuclear data resolve *L. melaniceps* as the sister taxon to *L. zapallarensis.* We suggest that for now *L. melaniceps* should remain a valid taxon, and that introgression with *L. silvai* from the mainland might explain our mitochondrial results. Further genomic studies should help clarify the status of these populations. Finally, the lizards from the close-by Damas Island considered to be a dark morph of *L. zapallarensis* (Troncoso-Palacios et al. 2015; Demangel 2016) is in this study confirmed to be an insular population of *L. silvai*.

L. nigroviridis

Liolaemus nigroviridis Müller & Hellmich 1932 was described containing two subspecies, *L. n. nigroviridis* from the San Francisco River Valley, and *L. n. minor* from the Volcán River in Cajón del Maipo, both in the Andes east of Santiago City, Chile (Müller and Hellmich 1932). A third subspecies, *L. n. campanae* was later described from La Campana Mountain, in the Costa Cordillera parallel to the Andes in central Chile (Hellmich 1950). Further studies showing low morphological and karyotypic differentiation concluded that this species was monotypic (Valencia et al. 1979; Núñez and Jaksic 1992). However, a later mtDNA study resolved deep divergence between the Andean and Costa Cordillera populations (Cianferoni et al. 2013), which we corroborate here, but further sampling from the Costa Cordillera, and nuclear gene sequences, are needed to resolve these issues. If the two lineages are supported as different species in the future, then the name *L. campanae* would be available for the Costa Cordillera populations.

L. chungara and *L. alticolor*

Liolaemus chungara Quinteros, Valladares, Semham, Acosta Barrionuevo & Abdala 2014 was described from the entrance to Putre, Arica and Parinacota Region. This species differs from *L. alticolor* Barbour 1909, a widespread species through the Altiplanic Andes, by the

presence of supernumerary pores in the males of *L. chungara* (Quinteros et al. 2014). On a recent visit to the type locality of *L. chungara,* Demangel (2016) found specimens assignable to both species, and he recognized *L. chungara* as a junior synonym of *L. alticolor* due to their very subtle differences and what seemed to be continuous variation. Our mtDNA analyses show that *L. chungara* and *L. alticolor* (including samples from very close to the type locality), are not reciprocally monophyletic, but since we lack nuclear data for *L. alticolor* we suggest that further studies are needed to clarify if *L. chungara* should be considered a junior synonym of *L. alticolor*.

L. paulinae and *L. puna*

Liolaemus paulinae Donoso-Barros 1961 was described from Calama, on the Loa River, Antofagasta Region, Chile (Donoso-Barros 1961b). Decades later, *L. puna* Lobo & Espinoza 2004 was described from Olacapato, Salta Province, Argentina, but without providing a diagnosis with *L. paulinae*, a very similar species. They also cite localities of *L. puna* east of Calama, Chile. In this study, we show that the Chilean populations assigned to *L. puna* are not genetically distinct from *L. paulinae*, and we can confirm that *L. puna* does not inhabit Chile. Without samples from the type locality of *L. puna* we cannot further evaluate the validity of this taxon, but further studies are needed to resolve the identity of this taxon.

L. pictus, L. septentrionalis and *L. araucaniensis*

By the far the most complex and unresolved taxa in this study are those identified as *L. pictus* (Duméril & Bibron 1837), *L. septentrionalis* Pincheira-Donoso & Núñez, and *L. araucaniensis* Müller & Hellmich 1932*,* where populations morphologically assigned to the same taxon are often not monophyletic. *Liolaemus pictus* was described with type locality as Chile, but was later restricted to Valdivia in Los Ríos Region on Chile (Hellmich 1934).

Several subspecies were included in *L. pictus*, but these were found to have no support from molecular data, for the exception of *L. septentrionalis* Pincheira-Donoso & Núñez, which was described from the Andes of the Maule Region in Chile (Vera-Escalona et al. 2012). Phylogeographic analyses using a thorough sampling of the distribution of *L. pictus* found two main clades (Vera-Escalona et al. 2012) split into northern and southern populations, which occur in proximity around Malalcahuello, in the Andes of the Araucanía Region of Chile. The northern clade was referred to as *L. septentrionalis* (Vera-Escalona et al. 2012). Our results infer up to four clades within *L. pictus* / *L. septentrionalis.* The northern populations of *L. septentrionalis* (including topotypes), which occur between the O'Higgins and Biobío Regions, form a well-supported clade. For the southern populations, morphologically equivalent specimens from the same locality are recovered in different clades, such as samples of *L. septentrionalis* from Nahuelbuta in the Araucanía Region. Moreover, some of the Araucanía Region clades are more closely related to the morphologically distinct *L. araucaniensis* Müller & Hellmich 1932. Our data show complex patterns of gene flow between these lineages (Vera-Escalona et al. 2012), but a large scale study of this group is needed to further clarify their history.

L. shitan, L. lonquimayensis and *L. elongatus*

Liolaemus shitan Abdala, Quinteros, Scrocchi & Stazzonelli 2010 was described from Argentinean Patagonia in the Rio Negro Province (Abdala et al. 2010), and *L. lonquimayensis* Escobar-Huerta, Santibáñez-Toro & Ortiz 2015 was described from the Patagonian Andes in the Araucanía Region of Chile; both of these are from populations previously considered to be *L. elongatus* Koslowsky 1896. Subsequent molecular work showed *L. shitan* to have divergent mitochondrial haplotypes, some of which were interdigitated with *L. elongatus*, and others outside of this complex. This has led some to

question the validity of *L. shitan* (Avila et al. 2015; Troncoso-Palacios et al. 2016; Medina et al. 2017), but see Medina et al. (2018). Our mtDNA analyses similarly infer *L. shitan* within populations of *L. elongatus*, but our nuclear data show that *L. shitan* is actually the sister taxon to the *L. elongatus* clade, and that the mtDNA discordance is due to introgression. Although we do not have nuclear data for *L. elongatus*, *L. lonquimayensis* and *L.* sp. 3 are close relatives to *L. elongatus*, and neither of these are inferred to be closely related to *L. shitan*. Our data suggests that *L. shitan* is a valid taxon. Similarly, *L. lonquimayensis* was resolved as part of the *L. elongatus* mtDNA gene tree, and was proposed as an invalid taxon (Troncoso-Palacios et al. 2016, 2018). However, our mtDNA results, based on a more extensive sampling of both *L. elongatus* and *L. lonquimayensis* from the Araucanía Region of Chile, inferred two well-supported clades; the northern clade includes populations from the Araucanía Region and Neuquén Province (Argentina), and the southern clade includes populations from Chubut and Río Negro Provinces (also in Argentina). However, another study using mtDNA and nDNA that the southern Neuquén populations group with the Chubut and Río Negro ones (Medina et al. 2017). For now, we consider *L. lonquimayensis* the populations found in the Araucanía in Chile and northern Neuquén in Argentina. Because the *L. elongatus* type locality is in Chubut, we propose for now the name *L. elongatus* be applied to Chubut, Rio Negro and southern Neuquén samples, and we apply *L. lonquimayensis* to northern Neuquén and Araucanía samples. The arrangement makes *L. elongatu*s absent from Chile, but further studies using dense geographic and molecular sampling are needed to assess if all these populations are conspecific or if there are two species, and if so, which are their distributional limits.

L. dicktracyi and *L. talampaya*

Liolaemus dicktracyi Espinoza & Lobo 2003 and *L. talampaya* Avila, Morando, Pérez & Sites Jr 2004, are two morphologically similar species from the Andes of La Rioja Province, Argentina, with type localities 90 km apart on different sides of the same mountain chain. Our mtDNA analyses do not infer them as reciprocally monophyletic, but our nuclear DNA analyses do. Nevertheless, the clear close relationship between these two calls for further studies, considering this as a case of incipient speciation, and to determine whether *L. talampaya* should be considered a junior synonym of *L. dicktracyi* or not.

L. monticola

Liolaemus monticola Müller & Hellmich 1932 was described for the San Francisco River Valley in the Andes east of Santiago City, Metropolitan Region, Chile. One notable aspect of this species is that populations vary in the chromosomal number, going from *2n=34* to *2n=44*, and these races are separated by riverine barriers (Lamborot 1991, 1998; Lamborot and Eaton 1992; Lamborot et al. 2003; Torres-Pérez et al. 2007; Vasquez et al. 2007). Moreover, two mitochondrial clades have been identified, north and south of the Maipo River (Vasquez et al. 2007; Torres-Pérez et al. 2009). This suggests *L. monticola* might in fact represent a complex of cryptic species. Similarly, our mtDNA gene tree recovers two non-sister *L. monticola* haploclades; the northern one includes samples from the Valparaíso, Coquimbo and Metropolitan Regions, sister to *L. nitidus*; and the southern one with samples from the Maule and O'Higgins Regions, sister to the (northern haploclade + *L. nitidus*), concordant with another study using mitochondrial data (Torres-Pérez et al. 2017). Since we do not have nuclear data for the southern samples, we cannot further assess the taxonomic issues, nor determine if this mitochondrial pattern is due to true species divergence or product of introgression. If future study reveals that the north and south clades are different species,

then the name *L. monticola* would apply to the northern clade, and a new name would have to be provided for the southern clade.

L. melanopleurus

Liolaemus melanopleurus (Philippi 1860) is an enigmatic species described from two specimens from the Atacama Region in Chile, but this description was vague and no specific locality was provided (Philippi 1860). However, Philippi mentions species actually found in the Antofagasta Region, leading to idea that this is where the specimens were actually collected (Troncoso-Palacios 2012). The species was synonymized with *L. darwinii* (Boulenger 1885) and *L. pallidus* (Tiedemann and Häupl 1980), but these were later rejected and *L. melanopleurus* considered of dubious validity (Ortiz and Núñez 1986). The two only known specimens of *L. melanopleurus* have clear affinities with *L. platei* (Ortiz and Núñez 1986; Troncoso-Palacios 2012). Troncoso-Palacios (2012) argued that new specimens are needed to establish if this is in fact a valid species or a synonym of *L. platei*, and that based on Philippi's expedition, specimens of *L. melanopleurus* might be found in the Andes of the Antofagasta Region. Based on the vague original description, the fact that specimens assignable to this species have never been collected again, and that we restrict *L. platei* to a southern distribution outside of Antofagasta (see below), we propose that *L. melanopleurus* be still considered a dubious taxon until further exploration of the Antofagasta Region is carried out.

Liolaemus sp. B

Liolaemus sp. B is an undescribed taxon from Malargüe, Mendoza, Argentina, first identified by Morando et al. (2003). Even though this taxon is morphologically almost identical to *L. austromendocinus* (Morando et al. 2003), mtDNA places it within the *kriegi* group (Morando

et al. 2003; Avila et al. 2004; Esquerré et al. 2019). However, nDNA places it within the *petrophilus* group (Feltrin 2013; Medina et al. 2015, 2018). Despite us not finding evidence of introgression in our networks on the origin of this taxon, previous studies indicate this species has undergone introgression and might be of hybrid origin (Medina et al. 2014). Further studies with denser locality and molecular sampling are needed to further assess the status of this lineage.

L. janequeoae

Liolaemus tolhuaca Demangel 2016 was described from a population in Laguna Verde, Tolhuaca National Park in the Araucanía Region of Chile, in a book on the reptiles of Chile (Demangel 2016). Later in 2016, *L. janequeoae* Troncoso-Palacios, Díaz, Puas, Riveros-Riffo & Elorza 2016 was described in a scientific paper based on specimens from the same locality, without a mention of the name alredy given to the taxon. These specimens belong to the same species described earlier as *L. tolhuaca* and so *L. janequeoae* was made a junior synonym (Diaz-Vega et al. 2018). Troncoso-Palacios et al (2019) reject all the taxonomic changes proposed in Demangel (2016) mostly based on a lack of peer-review, according to best practices in taxonomy (Kaiser et al. 2013). We use *L. janequeoae* here but acknowledge that this is a complicated case that needs resolution, and author DD does not agree with the use of *L. janequeoae,* as the name does not comply with the International Code of Zoological Nomenclature.

Finally, our results have revealed some populations that were wrongly assigned to species in previous studies, effectively shifting the known distributions of some taxa:

Liolaemus platei, L. velosoi and *L. hellmichi*

Liolaemus platei Werner 1898 is found in the arid coastal zones of central and north Chile between Antofagasta (Antofagasta Region) at its northern end and Chincolco (Valparaíso Region) at its southern end (Troncoso-Palacios and Ferri-Yáñez 2012). We included a sample of from La Chimba National Reserve, Antofagasta, which was considered the northern limit of *L. platei*, more than 700 km north of the type locality (Coquimbo, Coquimbo Region). This sample turned out to be *L. hellmichi* Donoso-Barros 1975, whose type locality is in Cerro Moreno just 20 km away. Moreover, the sample assigned to *L. platei* from Bahía Inglesa, Atacama Region, is inferred to be part of what we consider to be *L. velosoi* Ortiz 1987. Among our samples, only the one from Coquimbo (type locality) and Las Chinchillas National Reserve, both in the Coquimbo Region in the southern end of the original distribution, can be confidently assigned to *L. platei*. This group needs further study based on dense sampling and multiple data sets; our results suggest that southern populations around Coquimbo correspond to *L. platei*, the central ones around Atacama to *L. velosoi*, and the northern ones around Antofagasta to *L. hellmichi*.

L. gravenhorstii and *L. schroederi*

L. gravenhorstii (Gray 1845) was described from the type locality "Chile", but is currently known from the surroundings of Santiago. *L. schroederi* Müller & Hellmich 1938 was described from Los Queñes, in the Andes of the Maule Region of Chile, but is currently thought to occur between the Metropolitan and Araucanía Regions (Demangel 2016). They are morphologically similar and are often confused with each other, due to variable "diagnostic" characters (Esquerré and Núñez 2017; González-Gutiérrez 2018). Our analyses show that samples designated as *L. schroederi* from the Metropolitan Region are either *L. gravenhorstii* or hybrids between the two species.

Appendix II: Phylogenetic network results

For the *nigromaculatus* section we chose a network with one reticulation event between the ancestor of the *platei* + *zapallarensis* groups and an early diverging lineage (Fig. 3). For the *alticolor-bibronii* groups we find one network with two reticulations, between *L. gracilis* and *L. saxatilis* and between the *punmahuida* + *alticolor* groups and *L. araucaniensis* and another network with five reticulations across the groups, but this network cannot be rooted (Fig. 3). For the *gravenhorstii* group we find one network with two reticulations, between *schroederi* from Los Ruiles and the ancestor to the clade comprising *L. chiliensis, L. cyanogaster, L. pictus, L. septentrionalis* and *L. araucaniensis* and another between *L. pictus* and *L. septentrionalis* from Nahuelbuta and *L. brattstroemi*, and another network with four reticulations between varios lineages in the group (Fig. 3). Finally, for the *elongatus-kriegi* complex we find one network with a reticulation between *L. shitan* and *L. lonquimayensis* and another network with four reticulations across the group, including one between the two aforementioned species (Fig. 3).

Using *PhyloNet*, we found evidence for 20 reticulation events within *Liolaemus* (Fig. S19), many of which are concordant with the results of *PhyloNetworks* (Fig. 3). Five of these are within the *nigromaculatus* section, with most involving reticulation between the ancestor of the *lorenzmuelleri* group and the *nitidus*, *fuscus*, *lemniscatus* and *tenuis* groups. We also resolved five reticulation events within the *chiliensis* section, involving the *alticolor, bibronii, villaricensis*, *cristiani*, *punmahuida* and *chillanensis* groups. These groups also show strong discordance between nuclear and mtDNA trees. Additionally, the network infers the (*L. robertmertensi* + *L. ramirezae*) clade as a hybrid between *L. saxatilis* and an ancestor of the aforementioned groups. Within the *gravenhorstii* group, the optimal network infers *L.*

pictus as a hybrid between two sympatric lineages of *L. septentrionalis* (from Nahuelbuta). Also, three lineages of *L. schroederi* are inferred to be hybrids between *L. schroederi* and either *L. cyanogaster* or *L. gravenhorstii*. The Chapa Verde population in the O'Higgins Region of Chile identified as *L. cf. bellii* to be a hybrid between *L. moradoensis* and an ancestral lineage of the same clade. Finally, we infer five reticulation events within the *elongatus-kriegi* complex: the (*L. gununakuna* + *L. burmeisteri*) lineage is a hybrid between lineages of the *elongatus* (*L. carlosgarini*) and the *austromendocinus* groups; *L. shitan* is a hybrid between the *elongatus* (*L. lonquimayensis*) and *petrophilus* groups; *L. janequeoae*, *L. antonietae* and *L. cf. antonietae* are hybrids between different combinations of species in the *elongatus* group. All the reticulation events strongly match the clades and taxa that show high mtDNA-nDNA topological discordance.

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Figure S1. Maps of sampled populations used in this study. A: *tenuis, lemniscatus, nitidus, fuscus* and *lorenzmuelleri* groups. B: *zapallarensis* and *platei* groups. C: *gravenhorstii* group. D: *alticolor, chillanensis, neuquensis, villaricensis* and *bibronii* groups. E: *kriegi, capillitas, petrophilus, austromendocinus, cristiani* and *punmahuida* groups. F: *elongatus* group.

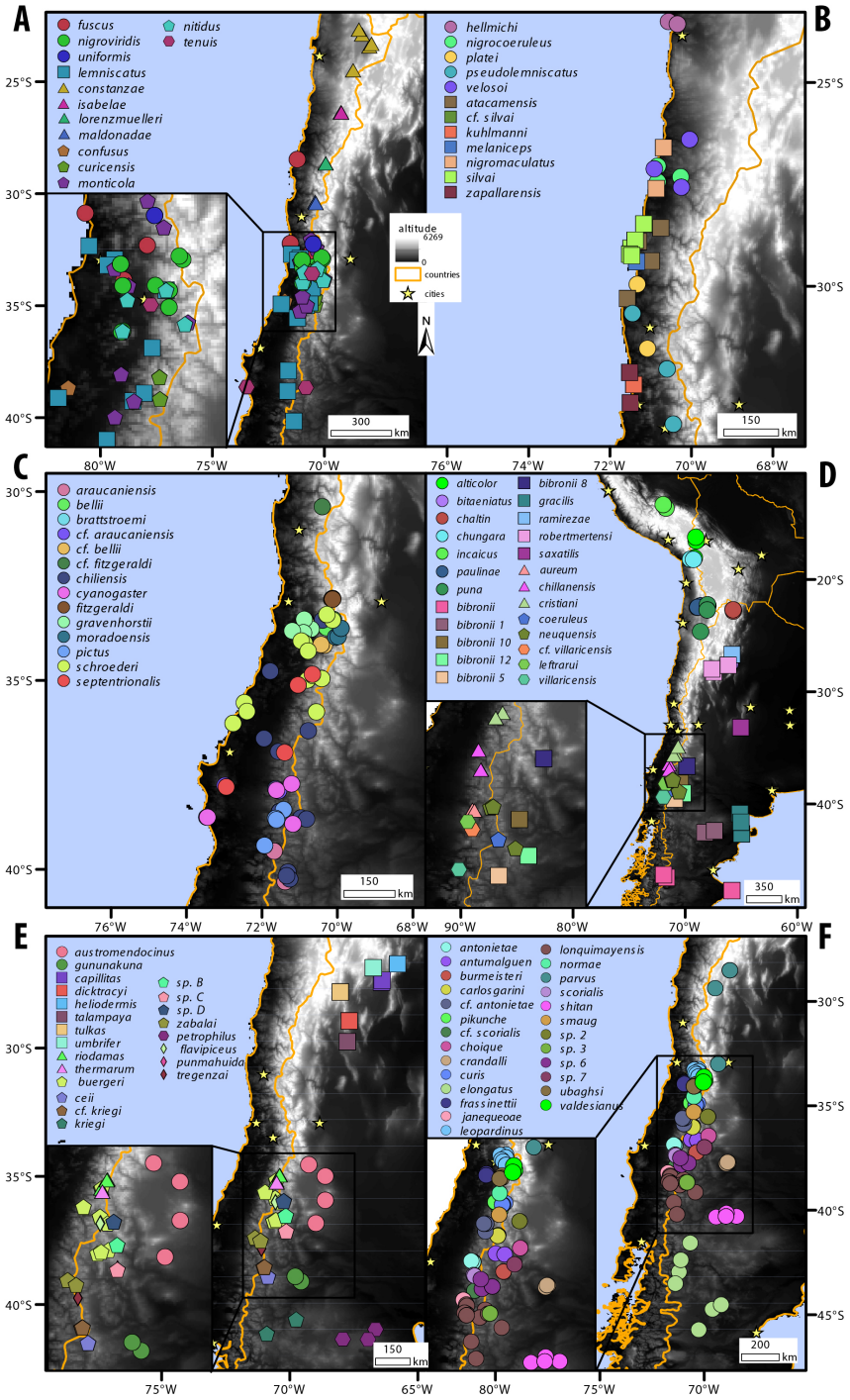


Figure S2. Cumulative number of loci with N number of SNPs and N number of parsimony informative SNPs.

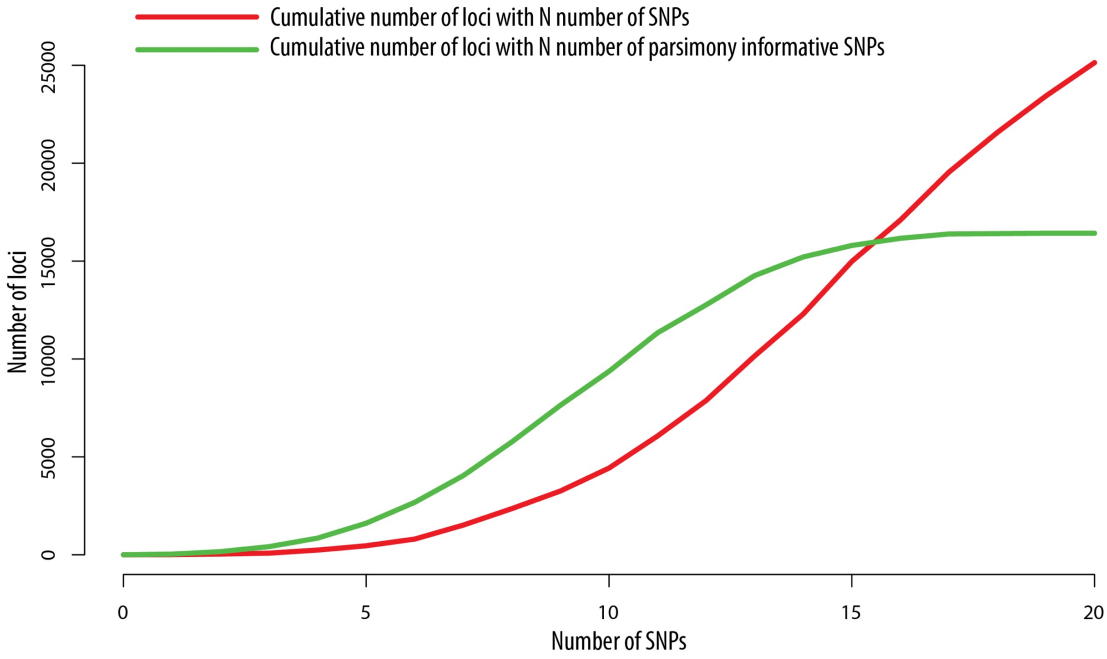


Figure S3. Number of recovered loci versus maximum proportion of samples with a shared heterozygous site.

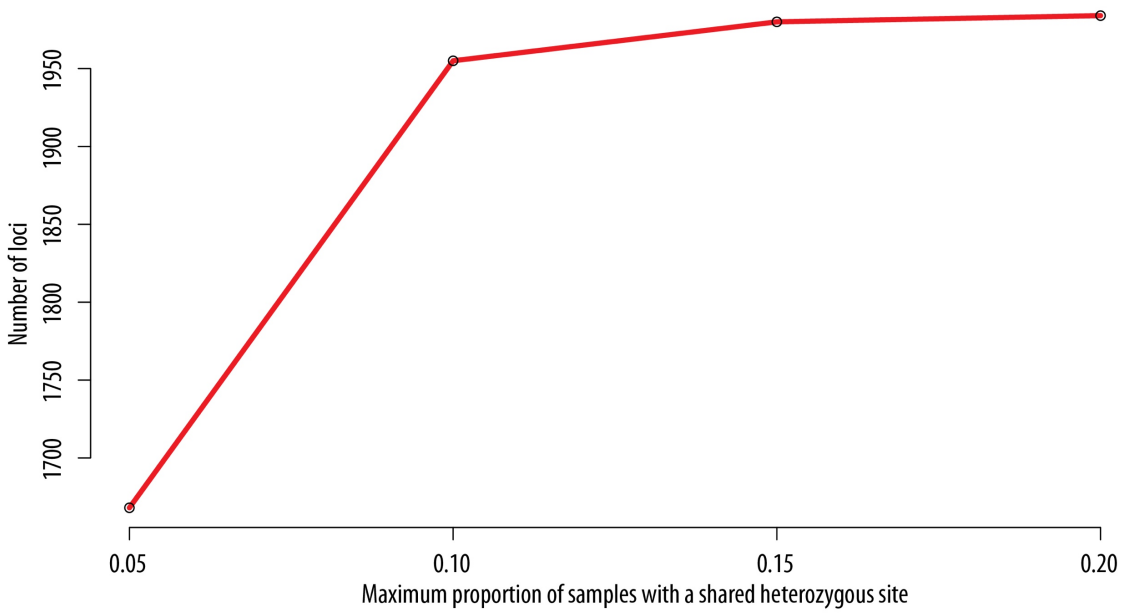


Figure S4. Concatenated and partitioned maximum likelihood mtDNA gene tree inferred by IQTree. The full tree is in Fig. S5. Branch support values correspond to ultrafast bootstrap / gene concordance factors / site concordance factors. Branch support towards the tips was removed for tidiness.

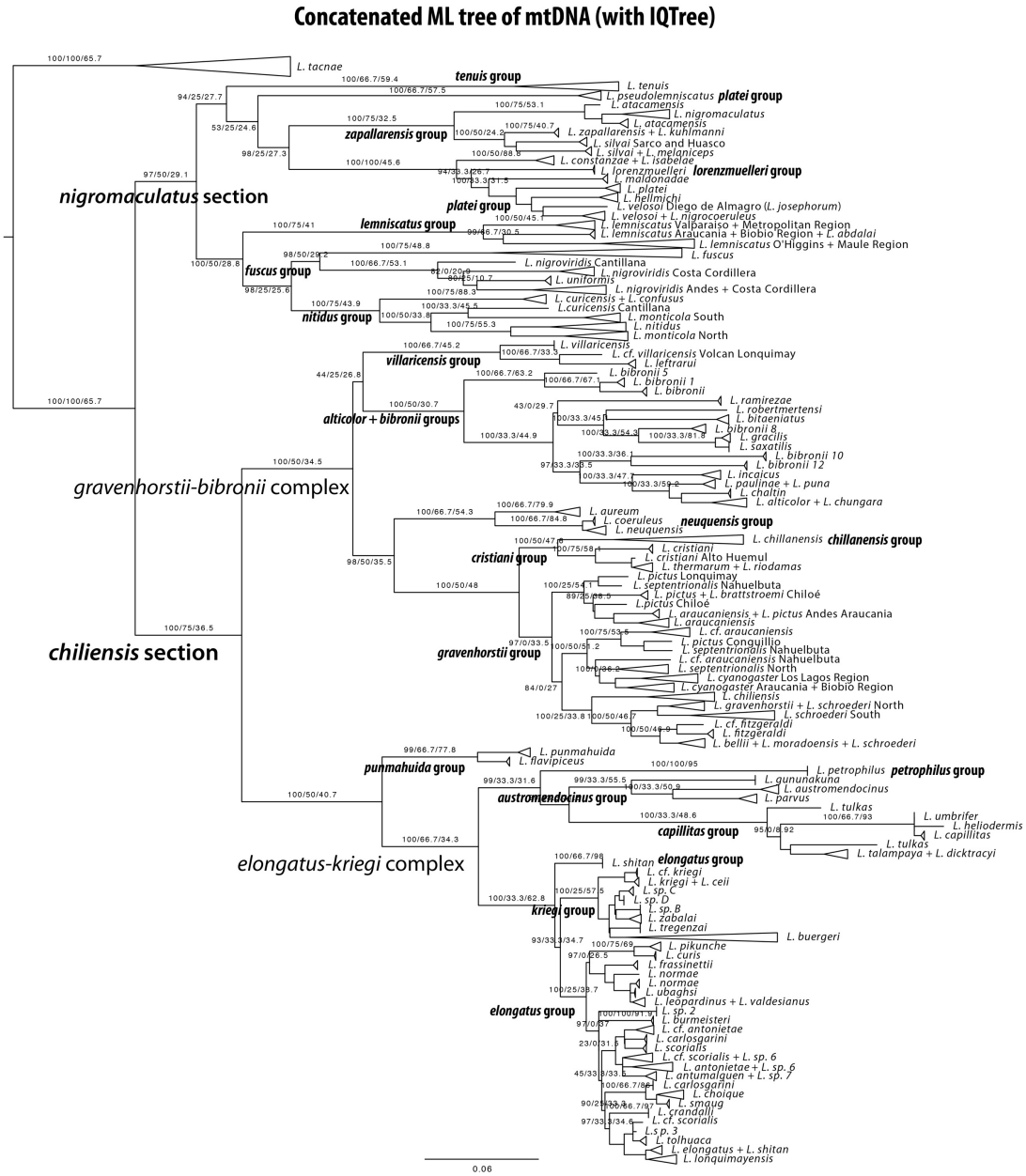
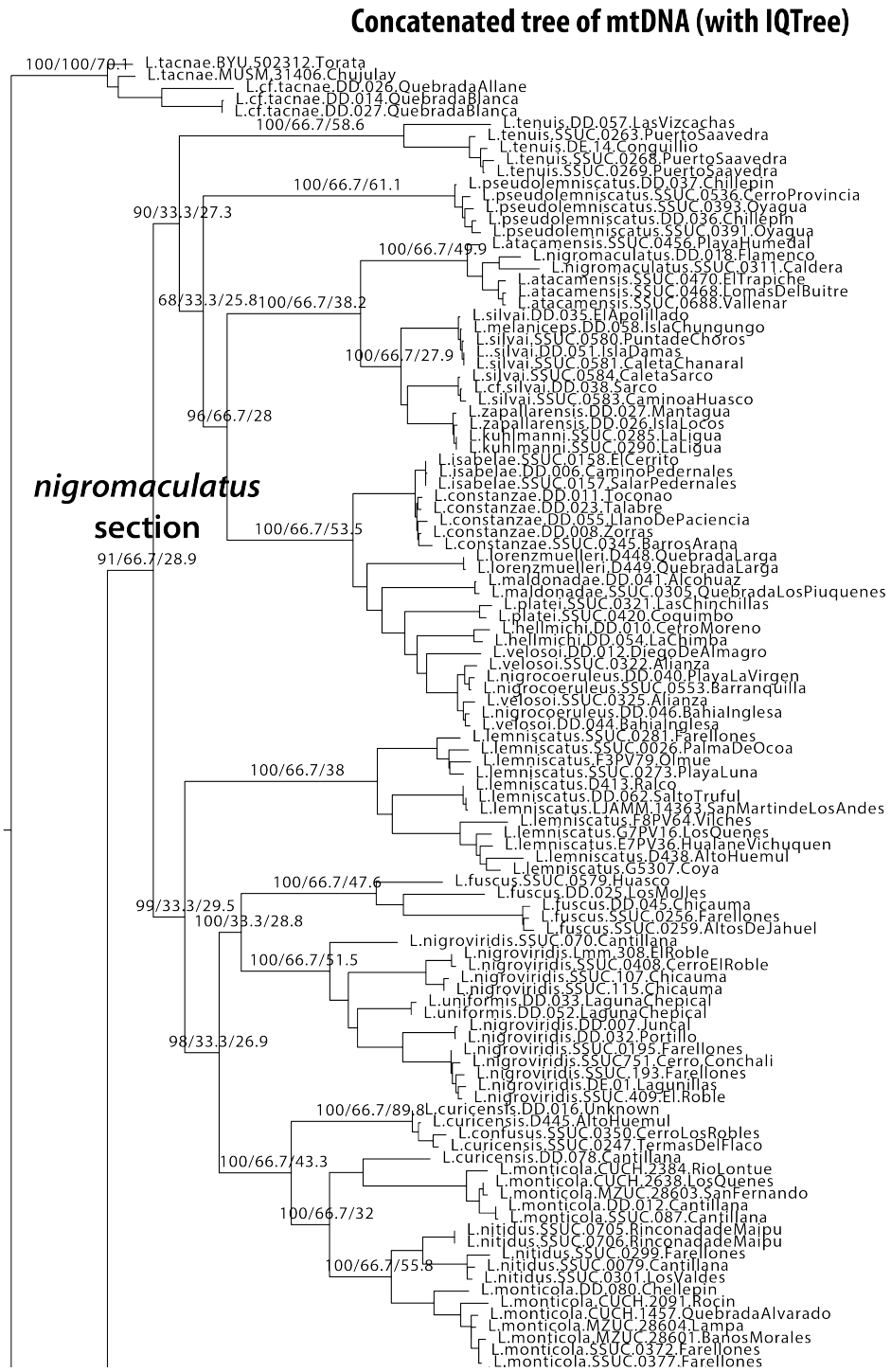
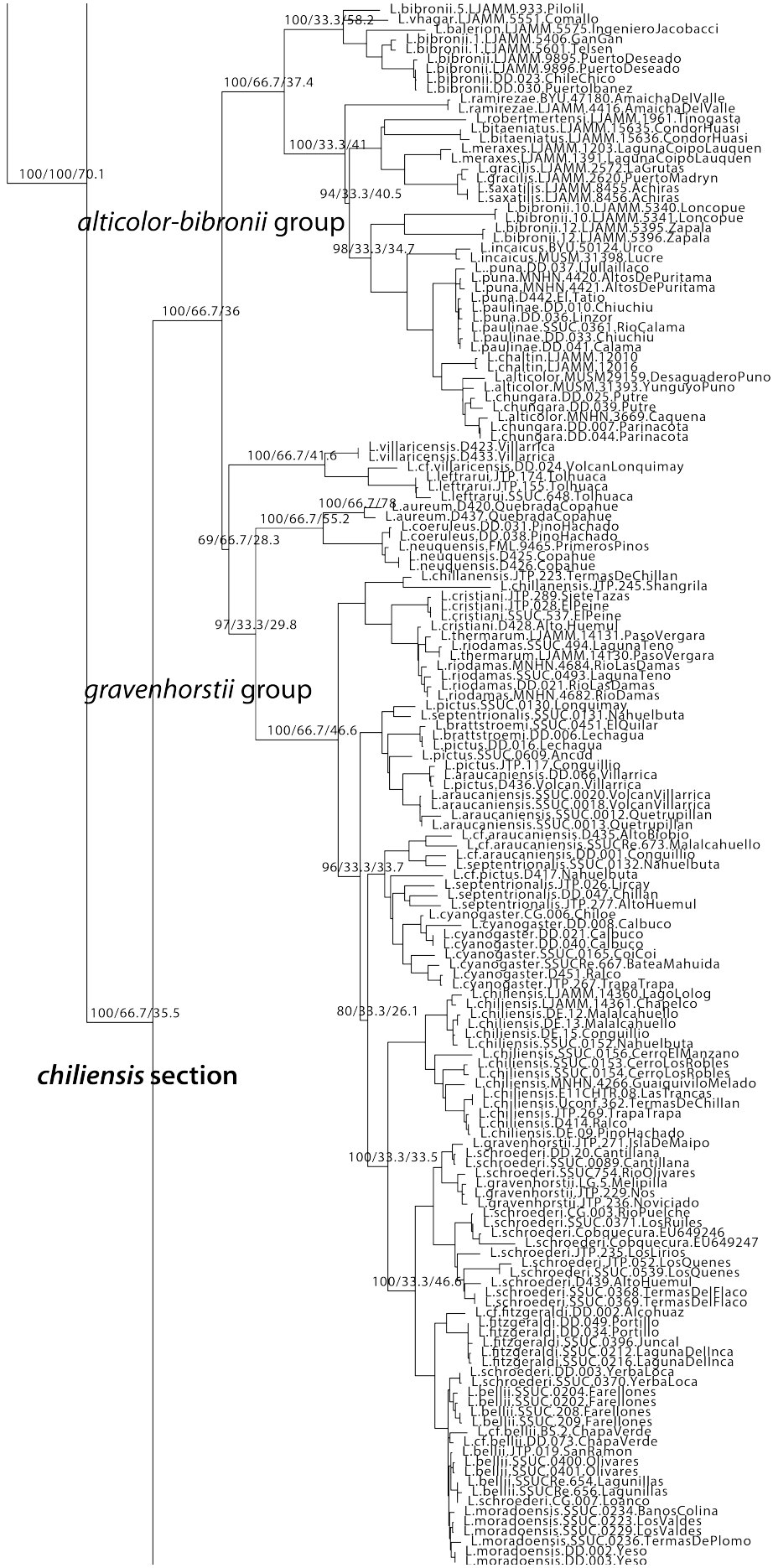


Figure S5. Concatenated phylogeny (without collapsing nodes) of the mtDNA, using IQTree. Branch support values correspond to ultrafast bootstrap / gene concordance factors / site concordance factors. Branch support towards the tips was removed for tidiness.




L.bibronii.5.LJAMM.933.Pilolil
L.vhagar.LJAMM.5551.Comallo
L.balerion.LJAMM.5575.IngenieroJacobacci
L.bibronii.1.LJAMM.5406.GanGan
L.bibronii.1.LJAMM.5601.Telsen
L.bibronii.LJAMM.9895.PuertoDeseado
L.bibronii.LJAMM.9896.PuertoDeseado
L.bibronii.DD.023.ChileChico
L.bibronii.DD.030.PuertoIbanez
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L.ramirezae.LJAMM.4416.AmaichaDelValle
L.robertmertensi.LJAMM.1961.Tinogasta
L.bitaeniatus.LJAMM.15635.CondorHuasi
L.bitaeniatus.LJAMM.15636.CondorHuasi
L.meraxes.LJAMM.1203.LagunaCoipoLauquen
L.meraxes.LJAMM.1391.LagunaCoipoLauquen
L.gracilis.LJAMM.2572.LaGrutas
L.gracilis.LJAMM.2620.PuertoMadryn
L.saxatilis.LJAMM.8455.Achiras
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L.bibronii.10.LJAMM.5341.Loncopue
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L.incaicus.MUSM.31398.Lucre
L..puna.DD.037.Llullaillaco
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L.puna.MNHN.4421.AltosDePuritama
L.puna.D442.El.Tatio
L.paulinae.DD.010.Chiuchiu
L.puna.DD.036.Linzor
L.paulinae.SSUC.0361.RioCalama
L.paulinae.DD.033.Chiuchiu
L.paulinae.DD.041.Calama
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L.chaltin.LJAMM.12016
L.alticolor.MUSM29159.DesaguaderoPuno
L.alticolor.MUSM.31393.YunguyoPuno
L.chungara.DD.025.Putre
L.chungara.DD.039.Putre
L.alticolor.MNHN.3669.Caquena
L.chungara.DD.007.Parinacota
L.chungara.DD.044.Parinacota
L.villaricensis.D423.Villarrica
L.villaricensis.D433.Villarrica
L.cf.villaricensis.DD.024.VolcanLonquimay
L.leftrarui.JTP.174.Tolhuaca
L.leftrarui.JTP.155.Tolhuaca
L.leftrarui.SSUC.648.Tolhuaca
L.aureum.D420.QuebradaCopahue
L.aureum.D437.QuebradaCopahue
L.coeruleus.DD.031.PinoHachado
L.coeruleus.DD.038.PinoHachado
L.neuquensis.FML.9465.PrimerosPinos
L.neuquensis.D425.Copahue
L.neuquensis.D426.Copahue
L.chillanensis.JTP.223.TermasDeChillan
L.chillanensis.JTP.245.Shangrila
L.cristiani.JTP.289.SieteTazas
L.cristiani.JTP.028.ElPeine
L.cristiani.SSUC.537.ElPeine
L.cristiani.D428.Alto.Huemul
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L.riodamas.SSUC.0493.LagunaTeno
L.riodamas.DD.021.RioLasDamas
L.riodamas.MNHN.4682.RioDamas
L.pictus.SSUC.0130.Lonquimay
L.septentrionalis.SSUC.0131.Nahuelbuta
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L.brattstroemi.DD.006.Lechagua
L.pictus.DD.016.Lechagua
L.pictus.SSUC.0609.Ancud
L.pictus.JTP.117.Conguillio
L.araucaniensis.DD.066.Villarrica
L.pictus.D436.Volcan.Villarrica
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L.araucaniensis.SSUC.0018.VolcanVillarrica
L.araucaniensis.SSUC.0012.Quetrupillan
L.araucaniensis.SSUC.0013.Quetrupillan
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L.cf.araucaniensis.DD.001.Conguillio
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L.cyanogaster.DD.021.Calbuco
L.cyanogaster.DD.040.Calbuco
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L.chiliensis.E11CHTR.08.LasTrancas
L.chiliensis.Uconf.362.TermasDeChillan
L.chiliensis.JTP.269.TrapaTrapa
L.chiliensis.D414.Ralco
L.chiliensis.DE.09.PinoHachado
L.gravenhorstii.JTP.271.IslaDeMaipo
L.schroederi.DD.20.Cantillana
L.schroederi.SSUC.0089.Cantillana
L.schroederi.SSUC754.RioOjivares
L.gravenhorstii.LG.5.Melipilla
L.gravenhorstii.JTP.229.Nos
L.gravenhorstii.JTP.236.Noviciado
L.schroederi.CG.003.RioPuelche
L.schroederi.SSUC.0371.LosRuiles
L.schroederi.Cobquecura.EU649246
L.schroederi.Cobquecura.EU649247
L.schroederi.JTP.235.LosLirios
L.schroederi.JTP.052.LosQuenes
L.schroederi.SSUC.0539.LosQuenes
L.schroederi.D439.AltoHuemul
L.schroederi.SSUC.0368.TermasDelFlaco
L.schroederi.SSUC.0369.TermasDelFlaco
L.cf.fitzgeraldi.DD.002.Alcohuaz
L.fitzgeraldi.DD.049.Portillo
L.fitzgeraldi.DD.034.Portillo
L.fitzgeraldi.SSUC.0396.Juncal
L.fitzgeraldi.SSUC.0212.LagunaDelInca
L.fitzgeraldi.SSUC.0216.LagunaDelInca
L.schroederi.DD.003.YerbaLoca
L.schroederi.SSUC.0370.YerbaLoca
L.bellii.SSUC.0204.Farellones
L.bellii.SSUC.0202.Farellones
L.bellii.SSUC.208.Farellones
L.bellii.SSUC.209.Farellones
L.cf.bellii.BS.2.ChapaVerde
L.cf.bellii.DD.073.ChapaVerde
L.bellii.JTP.019.SanRamon
L.bellii.SSUC.0400.Olivares
L.bellii.SSUC.0401.Olivares
L.bellii.SSUCRe.654.Lagunillas
L.bellii.SSUCRe.656.Lagunillas
L.schroederi.CG.007.Loanco
L.moradoensis.SSUC.0234.BanosColina
L.moradoensis.SSUC.0223.LosValdes
L.moradoensis.SSUC.0229.LosValdes
L.moradoensis.SSUC.0236.TermasDePlomo
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L.moradoensis.DD.003.Yeso
100/33.3/58.2
100/66.7/37.4
100/33.3/41
94/33.3/40.5
98/33.3/34.7
100/100/70.1
alticolor-bibronii group
100/66.7/36
100/66.7/41.6
100/66.7/78
100/66.7/55.2
69/66.7/28.3
97/33.3/29.8
gravenhorstii group
100/66.7/46.6
96/33.3/33.7
80/33.3/26.1
100/33.3/33.5
100/33.3/46.6
100/66.7/35.5
chiliensis section

elongatus-kriegi group

Figure S6. Concatenated ML tree of the *Liolaemus* subgenus (one sample per taxon) based on the ddRAD loci and inferred by IQ-Tree. Branch support values correspond to ultrafast bootstraps.

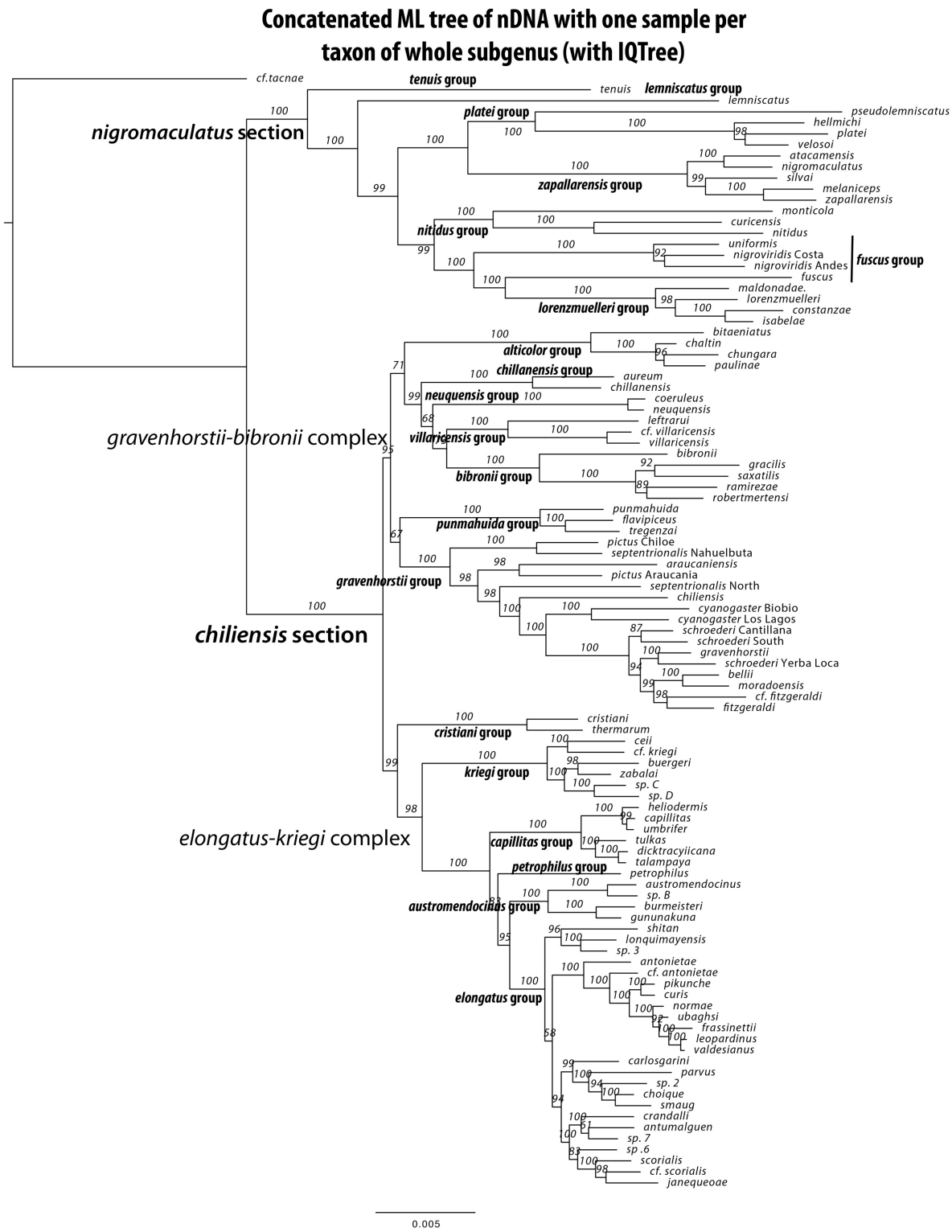


Figure S7. Concatenated and partitioned ML tree of the *nigromaculatus* section based on the ddRAD loci and inferred by IQ-Tree. Branch support values correspond to ultrafast bootstrap/gene concordance factors/site concordance factors. For full tree see Fig. S8.

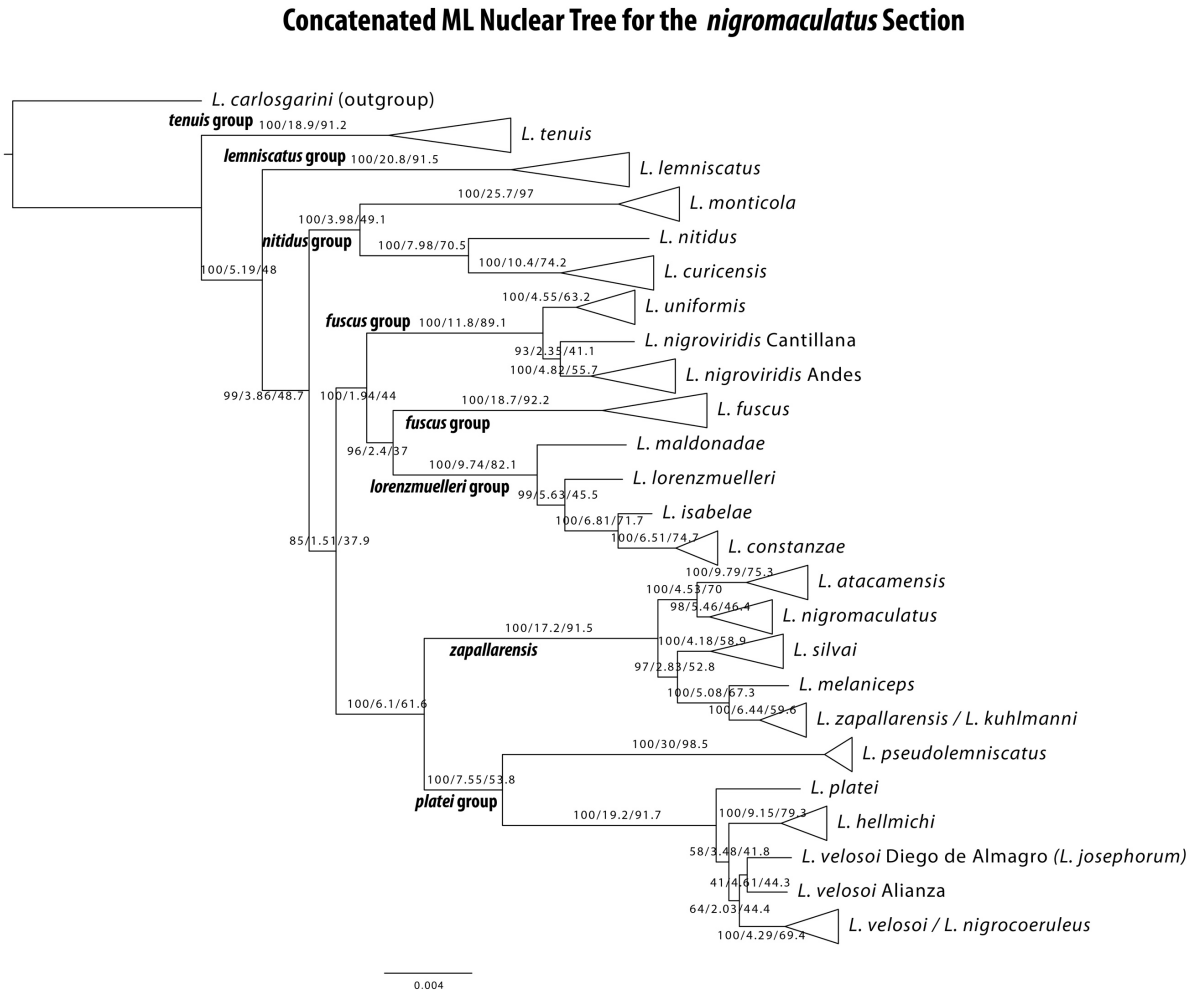


Figure S8. Concatenated and partitioned ML tree of the *nigromaculatus* section based on the ddRAD loci and inferred by IQ-Tree. Branch support values correspond to ultrafast bootstrap / gene concordance factors / site concordance factors.

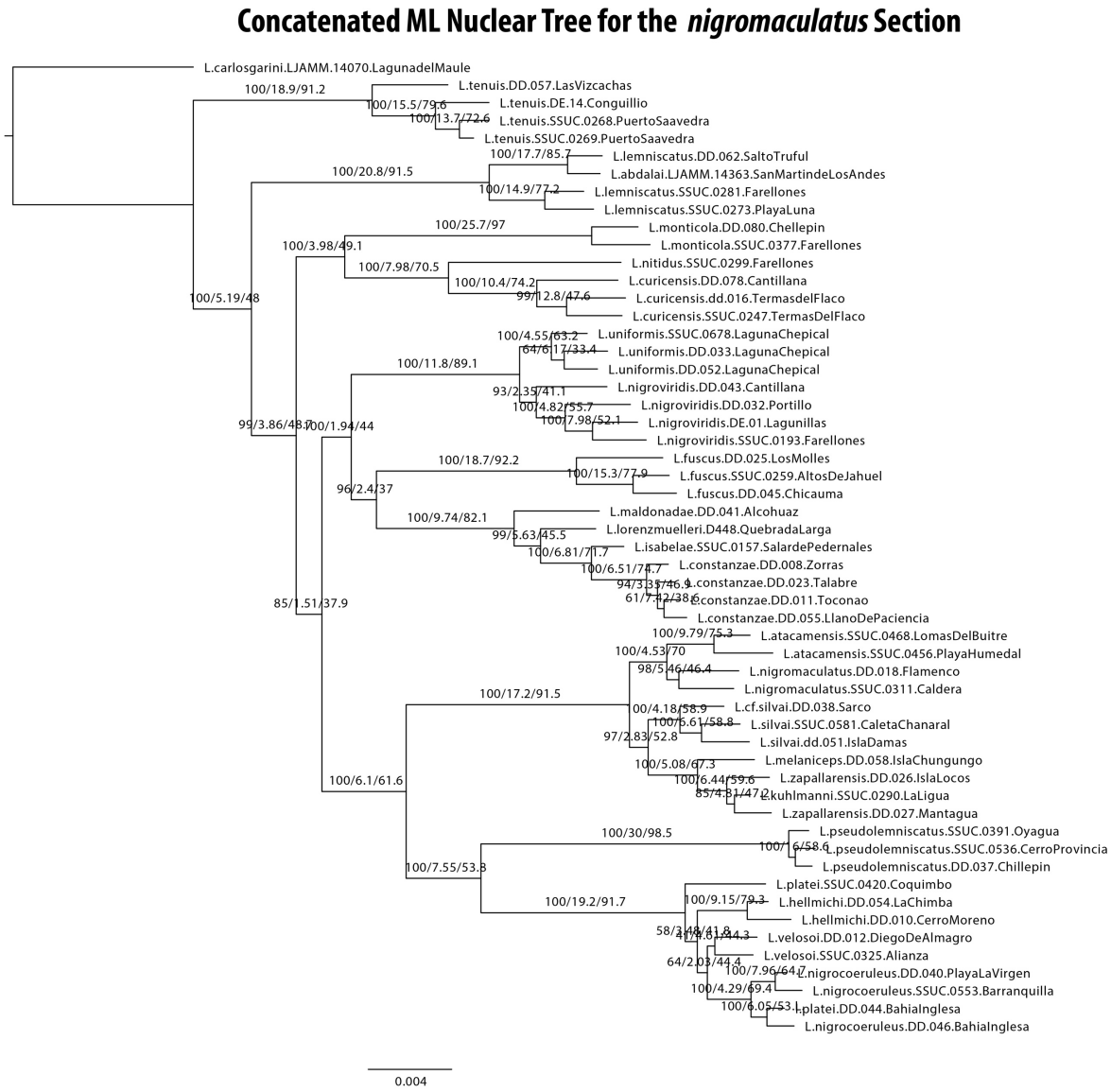


Figure S9. Concatenated and partitioned ML tree of the *chiliensis* section based on the ddRAD loci and inferred by IQ-Tree. Details are as in Fig. 6. For full tree see Fig. S10.

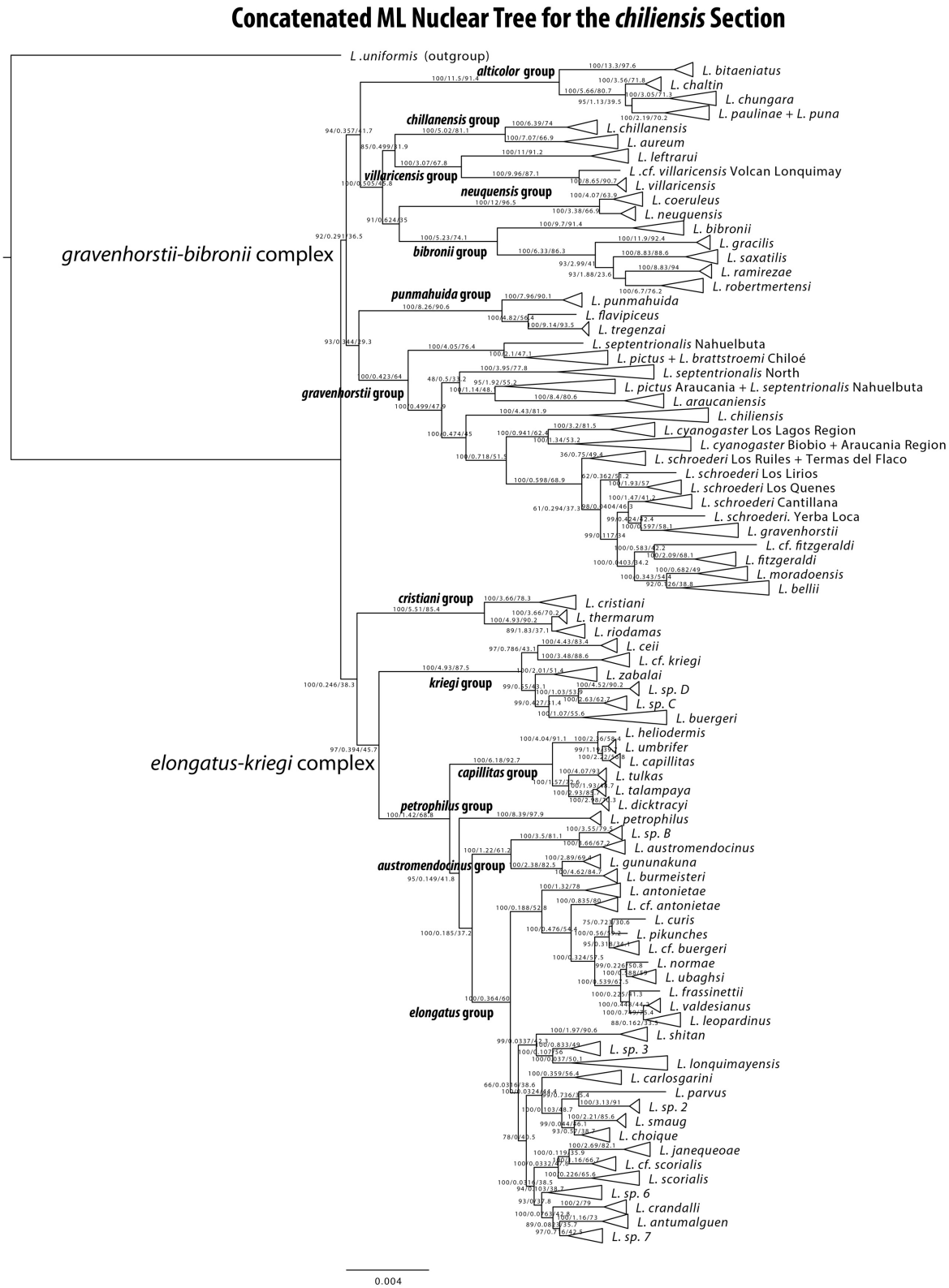
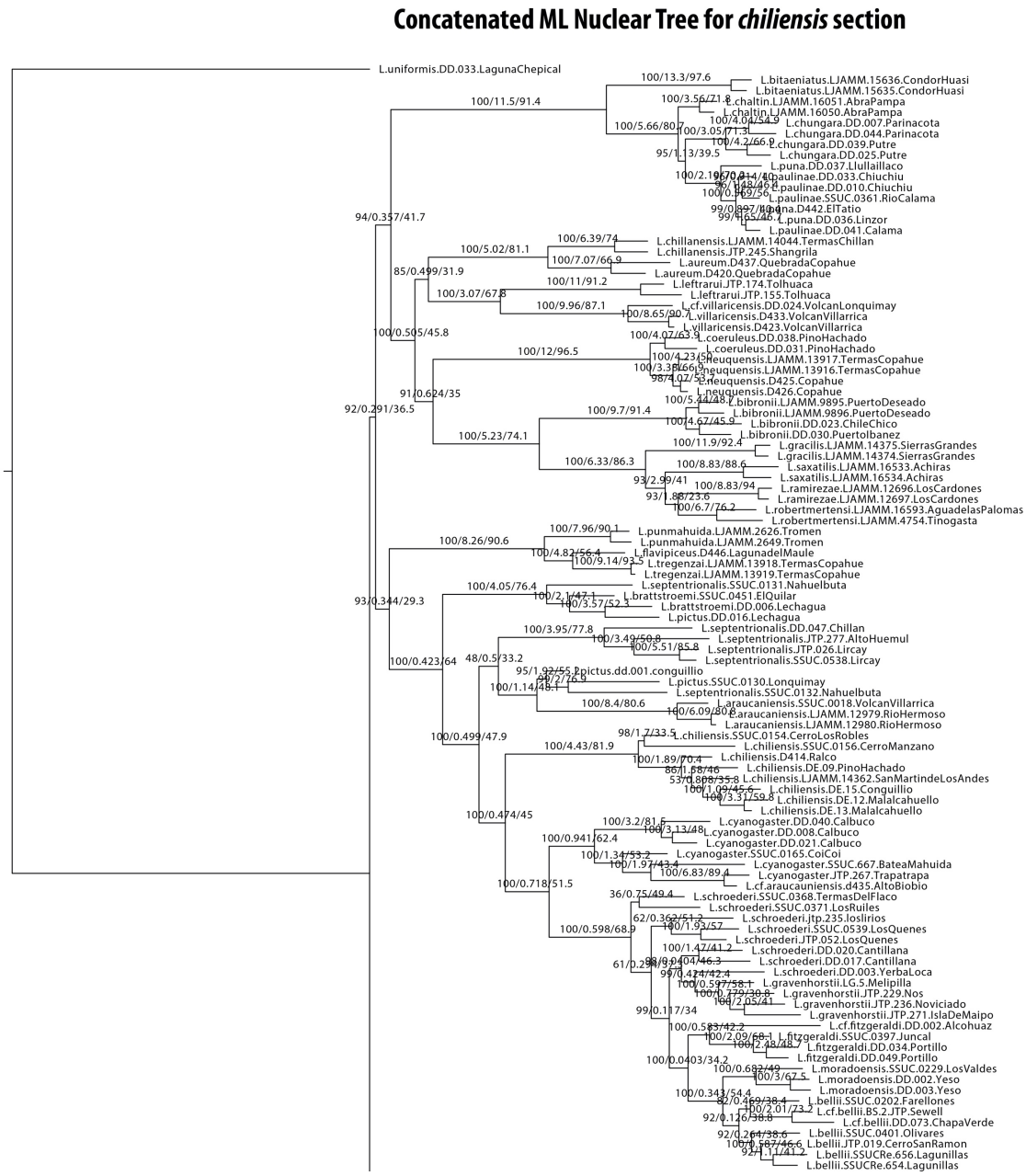
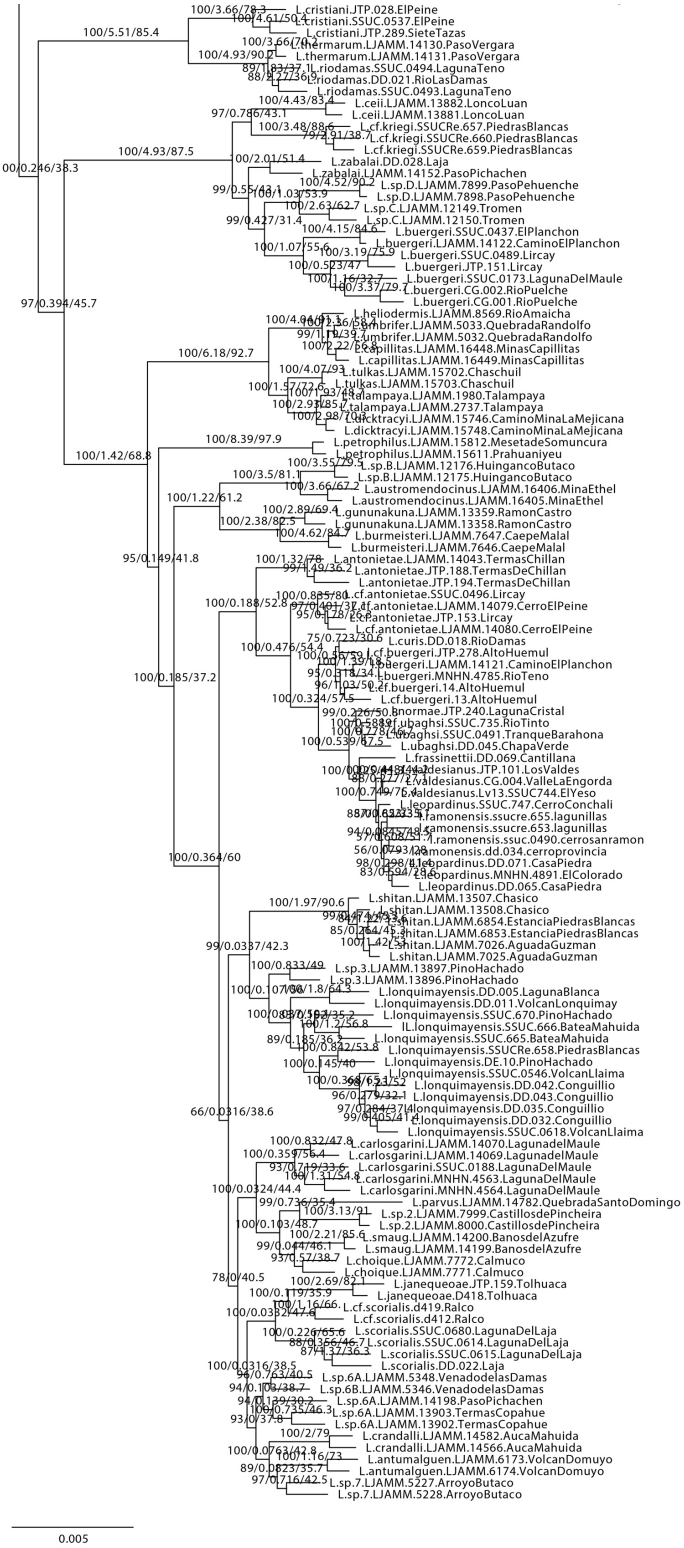


Figure S10. Concatenated and partitioned ML tree of the *chiliensis* section based on the ddRAD loci and inferred by IQ-Tree. Branch support values correspond to ultrafast bootstrap / gene concordance factors / site concordance factors.

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L.cristiani.SSUC.0537.ElPeine
L.cristiani.JTP.289.SieteTazas
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L.thermarum.LJAMM.14131.PasoVergara
L.riodamas.SSUC.0494.LagunaTeno
L.riodamas.DD.021.RioLasDamas
L.riodamas.SSUC.0493.LagunaTeno
L.ceii.LJAMM.13882.LoncoLuan
L.ceii.LJAMM.13881.LoncoLuan
L.cf.kriegi.SSUCRe.657.PiedrasBlancas
L.cf.kriegi.SSUCRe.660.PiedrasBlancas
L.cf.kriegi.SSUCRe.659.PiedrasBlancas
L.zabalai.DD.028.Laja
L.zabalai.LJAMM.14152.PasoPichachen
L.sp.D.LJAMM.7899.PasoPehuenche
L.sp.D.LJAMM.7898.PasoPehuenche
L.sp.C.LJAMM.12149.Tromen
L.sp.C.LJAMM.12150.Tromen
L.buergeri.SSUC.0437.ElPlanchon
L.buergeri.LJAMM.14122.CaminoElPlanchon
L.buergeri.SSUC.0489.Lircay
L.buergeri.JTP.151.Lircay
L.buergeri.SSUC.0173.LagunaDelMaule
L.buergeri.CG.002.RioPuelche
L.buergeri.CG.001.RioPuelche
L.heliodermis.LJAMM.8569.RioAmaicha
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L.dicktracyi.LJAMM.15748.CaminoMinaLaMejicana
L.petrophilus.LJAMM.15812.MesetadeSomuncura
L.petrophilus.LJAMM.15611.Prahuaniyeu
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L.gununakuna.LJAMM.13359.RamonCastro
L.gununakuna.LJAMM.13358.RamonCastro
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L.cf.buergeri.JTP.278.AltoHuemul
L.buergeri.LJAMM.14121.CaminoElPlanchon
L.buergeri.MNHN.4785.RioTeno
L.cf.buergeri.14.AltoHuemul
L.cf.buergeri.13.AltoHuemul
L.ubaghsi.SSUC.735.RioTinto
L.ubaghsi.SSUC.0491.TranqueBarahona
L.ubaghsi.DD.045.ChapaVerde
L.frassinettii.DD.069.Cantillana
L.valdesianus.JTP.101.LosValdes
L.valdesianus.CG.004.ValleLaEngorda
L.valdesianus.Lv13.SSUC744.ElYeso
L.leopardinus.SSUC.747.CerroConchali
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L.ramonensis.ssucre.653.lagunillas
L.ramonensis.ssuc.0490.cerrosanramon
L.ramonensis.dd.034.cerroprovincia
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L.leopardinus.MNHN.4891.ElColorado
L.leopardinus.DD.065.CasaPiedra
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L.shitan.LJAMM.7025.AguadaGuzman
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L.lonquimayensis.DE.10.PinoHachado
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L.lonquimayensis.DD.042.Conguillio
L.lonquimayensis.DD.043.Conguillio
L.lonquimayensis.DD.035.Conguillio
L.lonquimayensis.DD.032.Conguillio
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L.carlosgarini.SSUC.0188.LagunaDelMaule
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L.sp.2.LJAMM.8000.CastillosdePincheira
L.smaug.LJAMM.14200.BanosdelAzufre
L.smaug.LJAMM.14199.BanosdelAzufre
L.choique.LJAMM.7772.Calmuco
L.choique.LJAMM.7771.Calmuco
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L.janequeoae.D418.Tolhuaca
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L.cf.scorialis.d412.Ralco
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L.scorialis.SSUC.0614.LagunaDelLaja
L.scorialis.SSUC.0615.LagunaDelLaja
L.scorialis.DD.022.Laja
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L.sp.6B.LJAMM.5346.VenadodelasDamas
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L.sp.6A.LJAMM.13903.TermasCopahue
L.sp.6A.LJAMM.13902.TermasCopahue
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L.crandalli.LJAMM.14566.AucaMahuida
L.antumalguen.LJAMM.6173.VolcanDomuyo
L.antumalguen.LJAMM.6174.VolcanDomuyo
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L.sp.7.LJAMM.5228.ArroyoButaco
0.005

Figure S11. Concatenated MCC tree from a Bayesian inference using the ddRAD loci, from the assembly with one sample per taxa for the *Liolaemus* subgenus. Inferred with ExaBayes. Branch support values correspond to posterior probabilities.

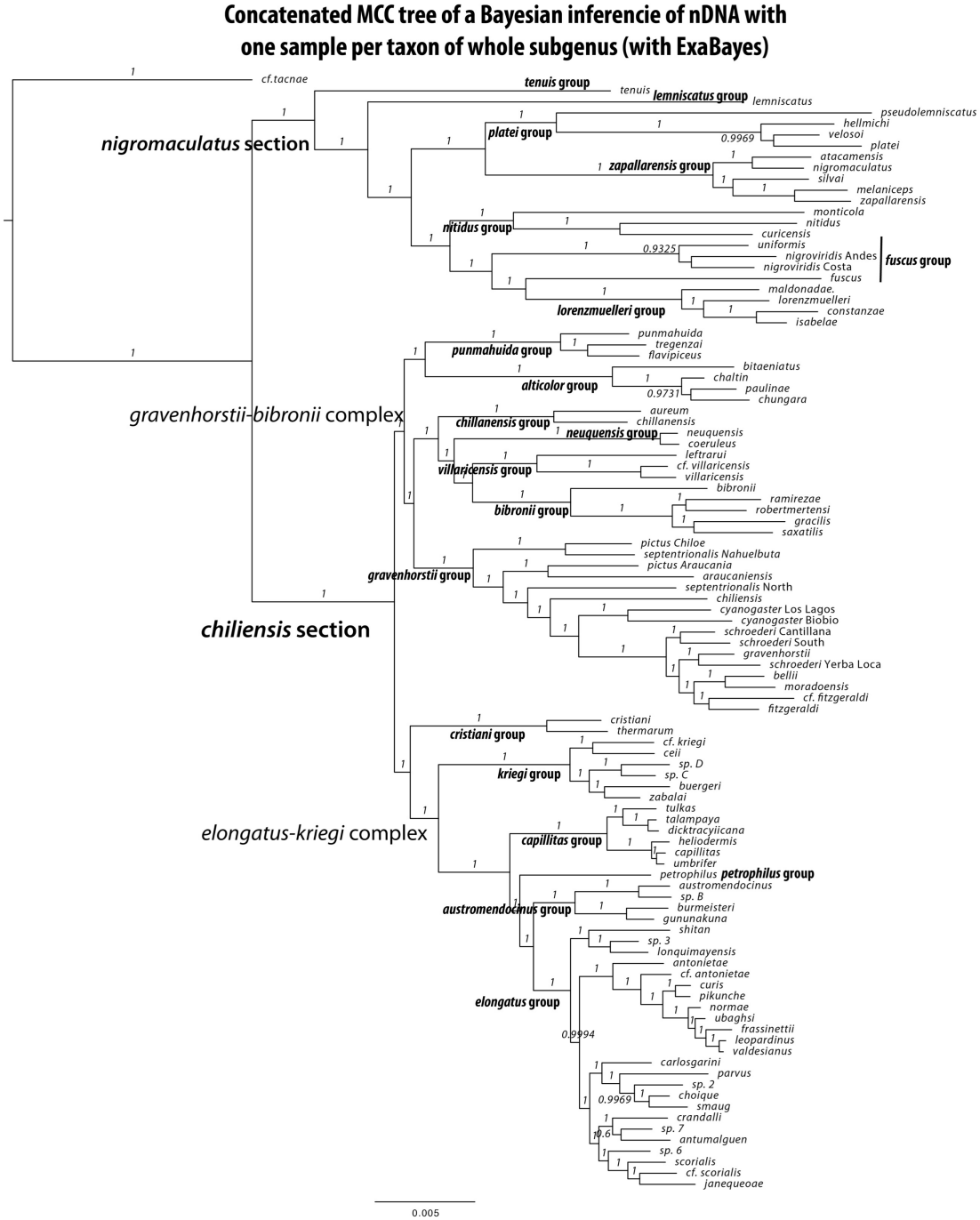


Figure S12. Concatenated MCC tree from a Bayesian inference using the ddRAD loci, from the assembly the *nigromaculatus* section. Inferred with ExaBayes. Branch support values correspond to posterior probabilities. Full tree in Fig. S13.

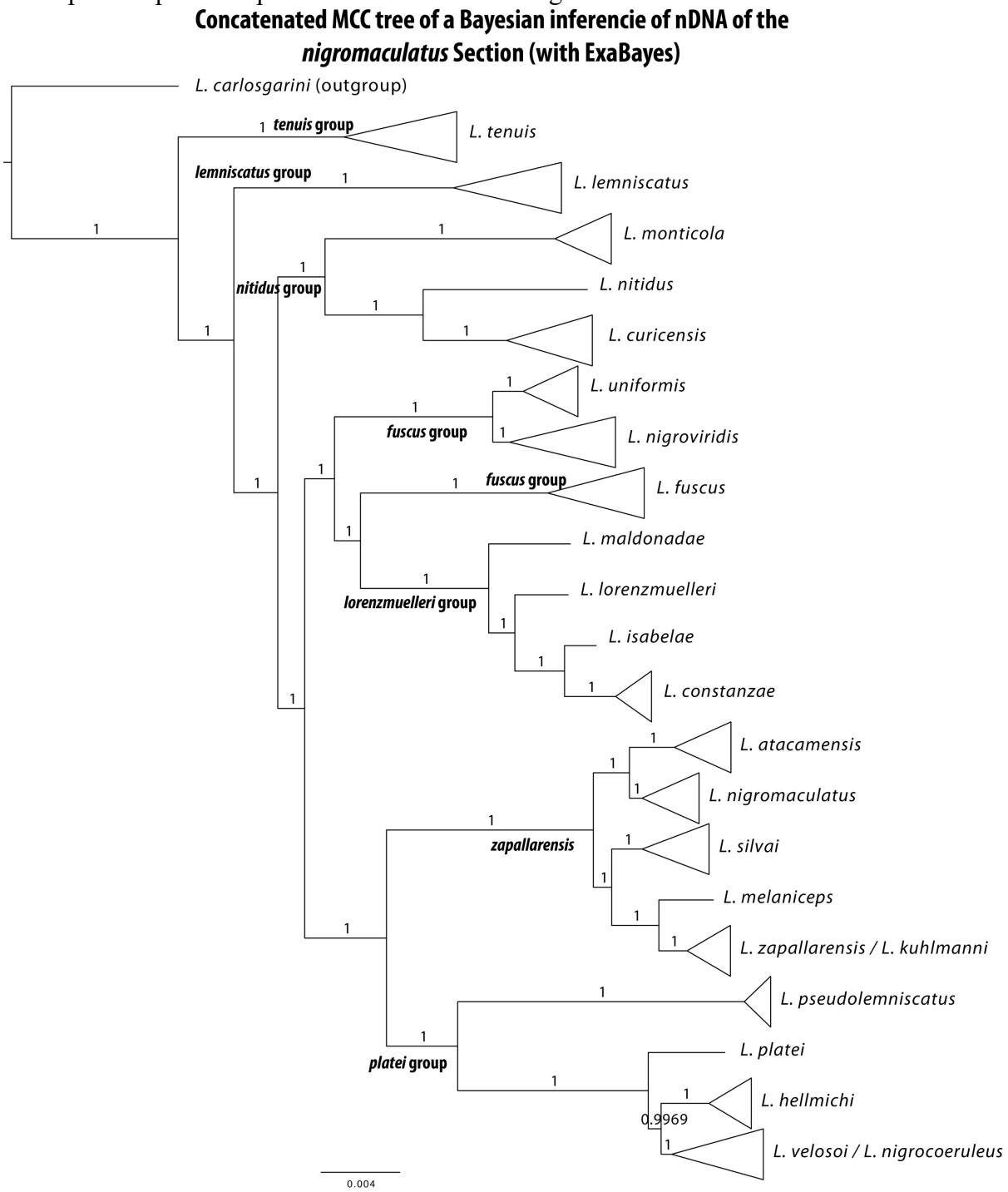


Figure S13. Concatenated MCC tree from a Bayesian inference using the ddRAD loci, from the assembly the *nigromaculatus* section. Inferred with ExaBayes. Branch support values correspond to posterior probabilities.

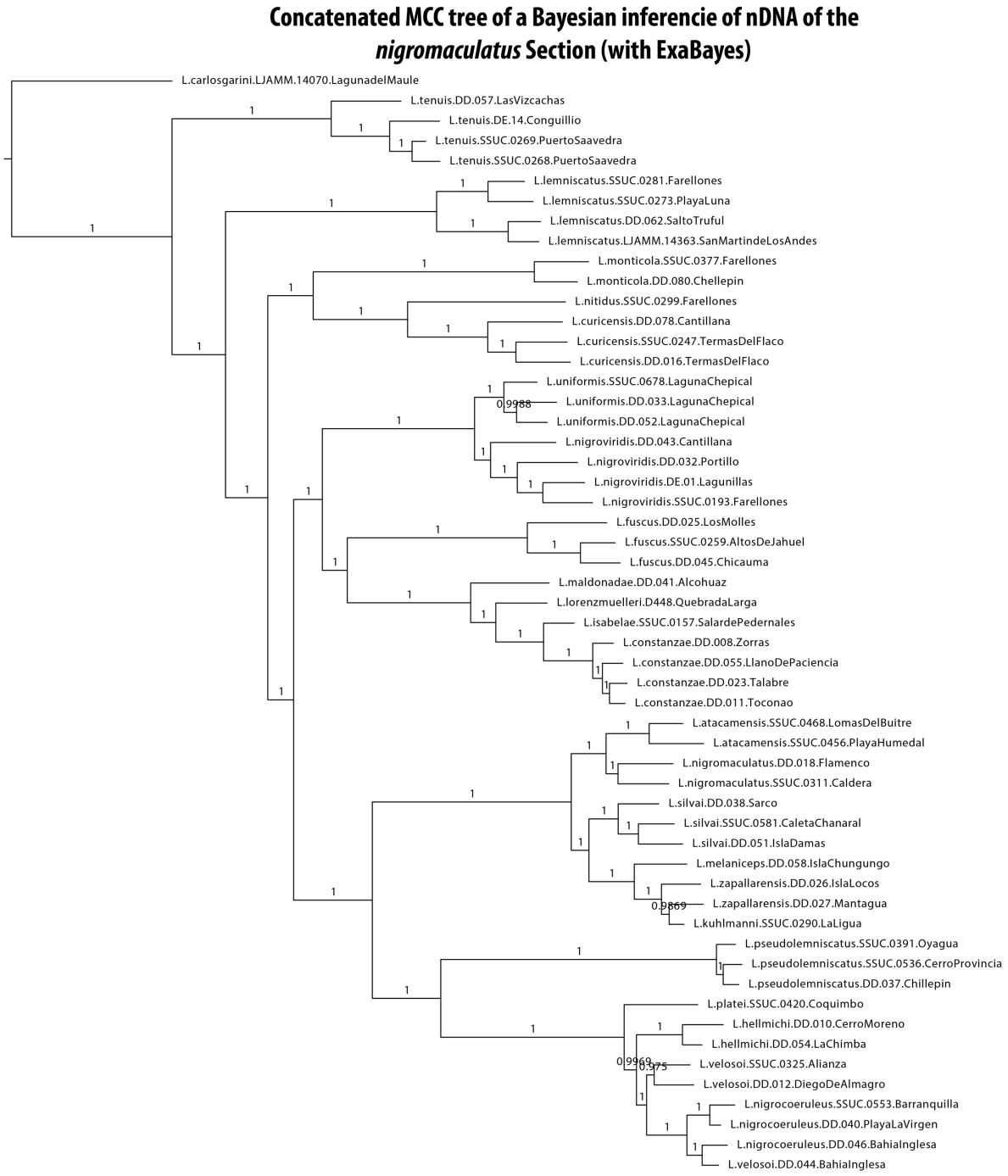


Figure S14. Concatenated MCC tree from a Bayesian inference using the ddRAD loci, from the assembly the *chiliensis* section. Inferred with ExaBayes. Branch support values correspond to posterior probabilities. Full tree in Fig. S15.

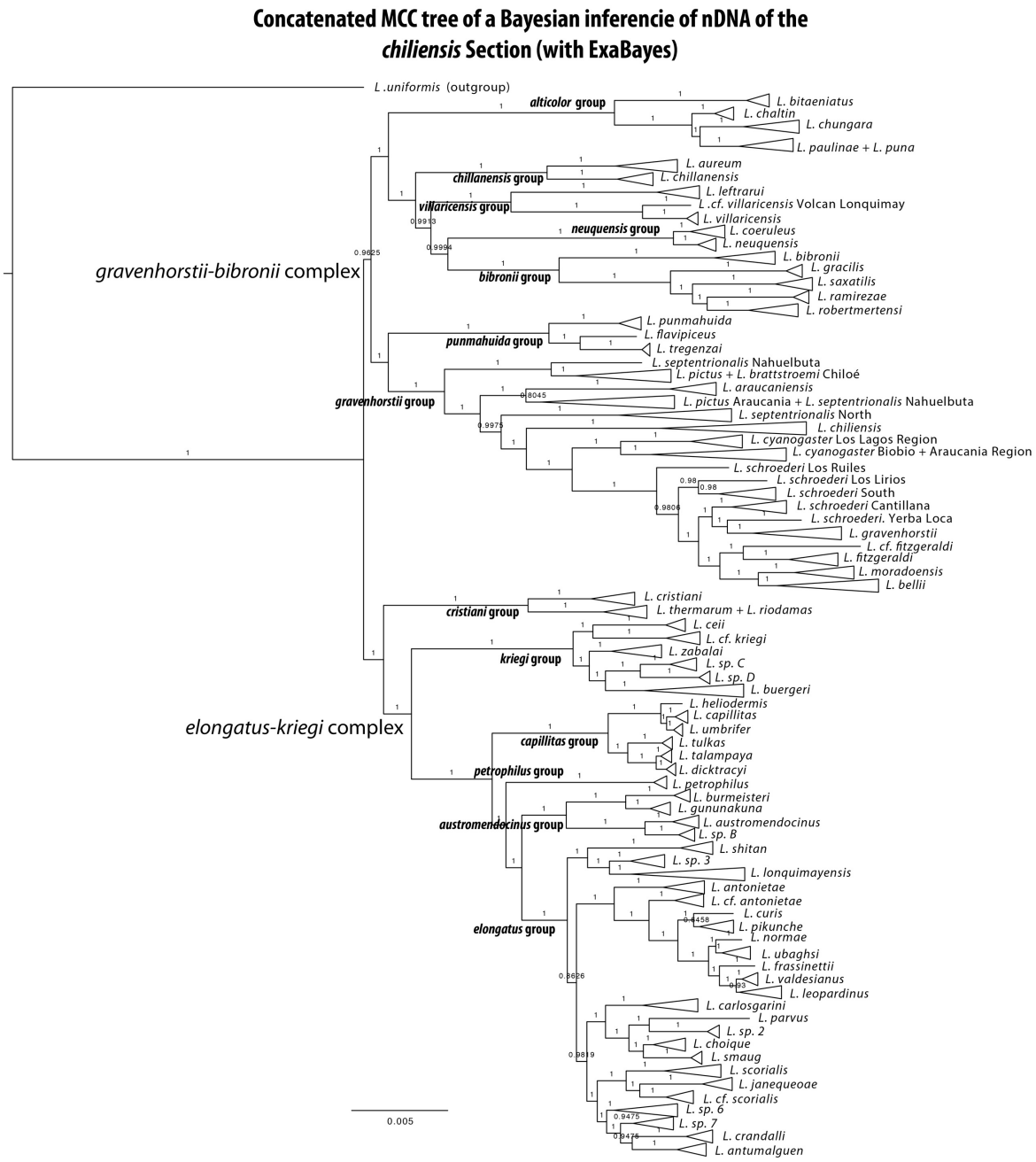
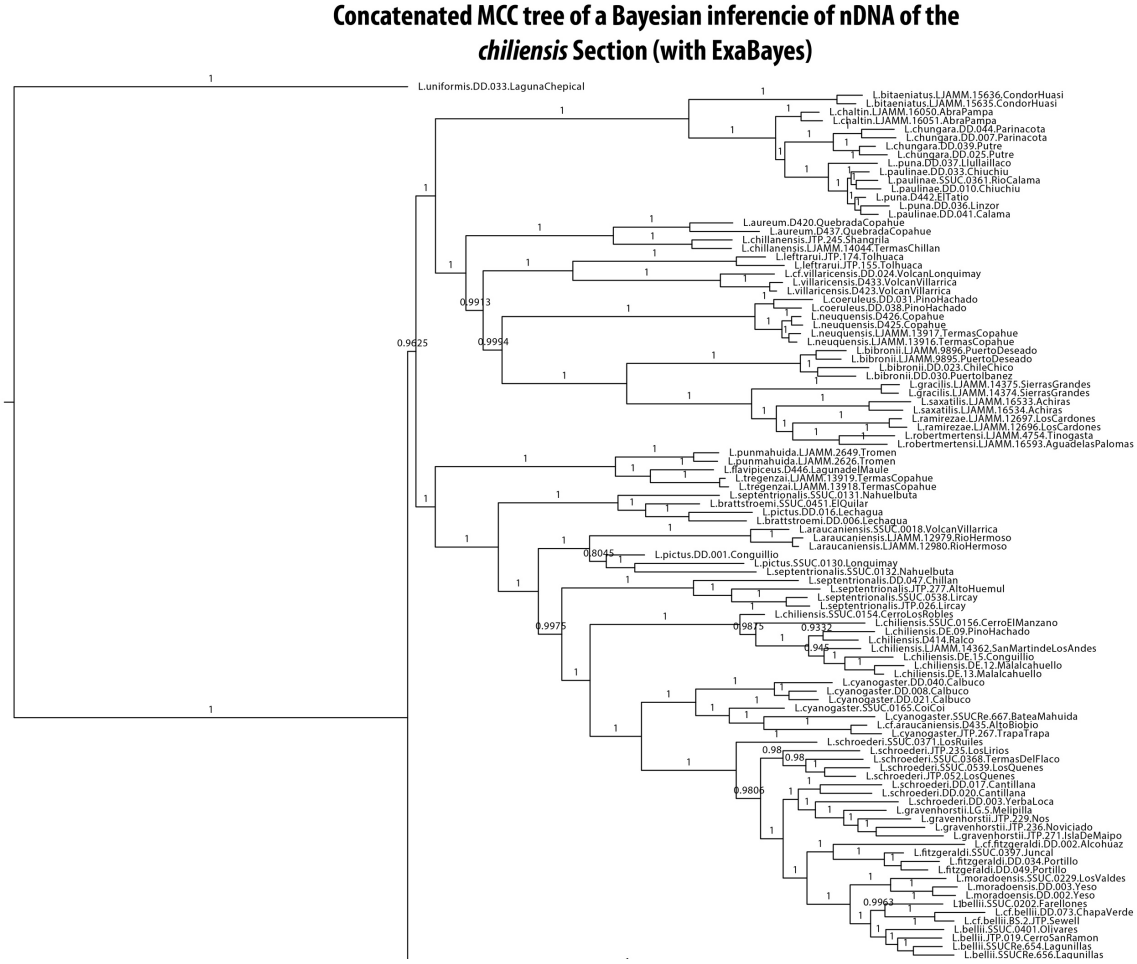


Figure S15. Concatenated MCC tree from a Bayesian inference using the ddRAD loci, from the assembly the *chiliensis* section. Inferred with ExaBayes. Branch support values correspond to posterior probabilities.

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L.thermarum.LJAMM.14130.PasoVergara
L.thermarum.LJAMM.14131.PasoVergara
L.riodamas.SSUC.0493.LagunaTeno
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L.sp.D.LJAMM.7898.PasoPehuenche
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L.heliodermis.LJAMM.8569.RioAmaicha
L.capillitas.LJAMM.16448.MinasCapillitas
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L.petrophilus.LJAMM.15812.MesetadeSomuncura
L.petrophilus.LJAMM.15611.Prahuaniyeu
L.burmeisteri.LJAMM.7647.CaepeMalal
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L.shitan.LJAMM.13508.Chasico
L.shitan.LJAMM.7025.AguadaGuzman
L.shitan.LJAMM.7026.AguadaGuzman
L.shitan.LJAMM.6853.EstanciaPiedrasBlancas
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L.lonquimayensis.SSUCRe.658.PiedrasBlancas
L.lonquimayensis.DE.10.PinoHachado
L.lonquimayensis.SSUC.0546.VolcanLlaima
L.lonquimayensis.DD.042.Conguillio
L.lonquimayensis.DD.043.Conguillio
L.lonquimayensis.DD.035.Conguillio
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L.lonquimayensis.DD.032.Conguillio
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L.antonietae.JTP.188.TermasDeChillan
L.antonietae.JTP.194.TermasDeChillan
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L.cf.antonietae.LJAMM.14079.CerroElPeine
L.cf.antonietae.JTP.153.Lircay
L.cf.antonietae.LJAMM.14080.CerroElPeine
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L.cf.buergeri.JTP.278.AltoHuemul
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L.cf.buergeri.DD.13.AltoHuemul
L.cf.buergeri.14.altohuemul
L.normae.SSUC.742.LagunaCristal
L.ubaghsi.SSUC735.RioTinto
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L.ubaghsi.DD.045.ChapaVerde
L.frasinettii.DD.069.Cantillana
L.valdesianus.JTP.101.LosValdes
L.valdesianus.CG.004.ValleLaEngorda
L.valdesianus.LV13.SSUC744.ElYeso
L.leopardinus.SSUC.747.CerroConchali
L.leopardinus.SSUCRe.655.Lagunillas
L.leopardinus.SSUCRe.653.Lagunillas
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L.leopardinus.SSUC.0490.CerroSanRamon
L.leopardinus.DD.071.CasaPiedra
L.leopardinus.DD.065.CasaPiedra
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L.choique.LJAMM.7772.Calmuco
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L.sp.7.LJAMM.5227.ArroyoButaco
L.sp.7.LJAMM.5228.ArroyoButaco
L.crandalli.LJAMM.14582.AucaMahuida
L.crandalli.LJAMM.14566.AucaMahuida
L.antumalguen.LJAMM.6173.VolcanDomuyo
L.antumalguen.LJAMM.6174.VolcanDomuyo
0.8663
0.9938
0.9981
0.9796
0.9158
0.9995
0.96
0.4189
0.93
0.9994
0.8626
0.9981
0.9819
0.9975
0.9475
0.9475

Figure S16. Species tree based on the MSC using the nuclear data for the *nigromaculatus* section. Large numbers indicate groups as in Table 1. Branch labels indicate bootstrap support.

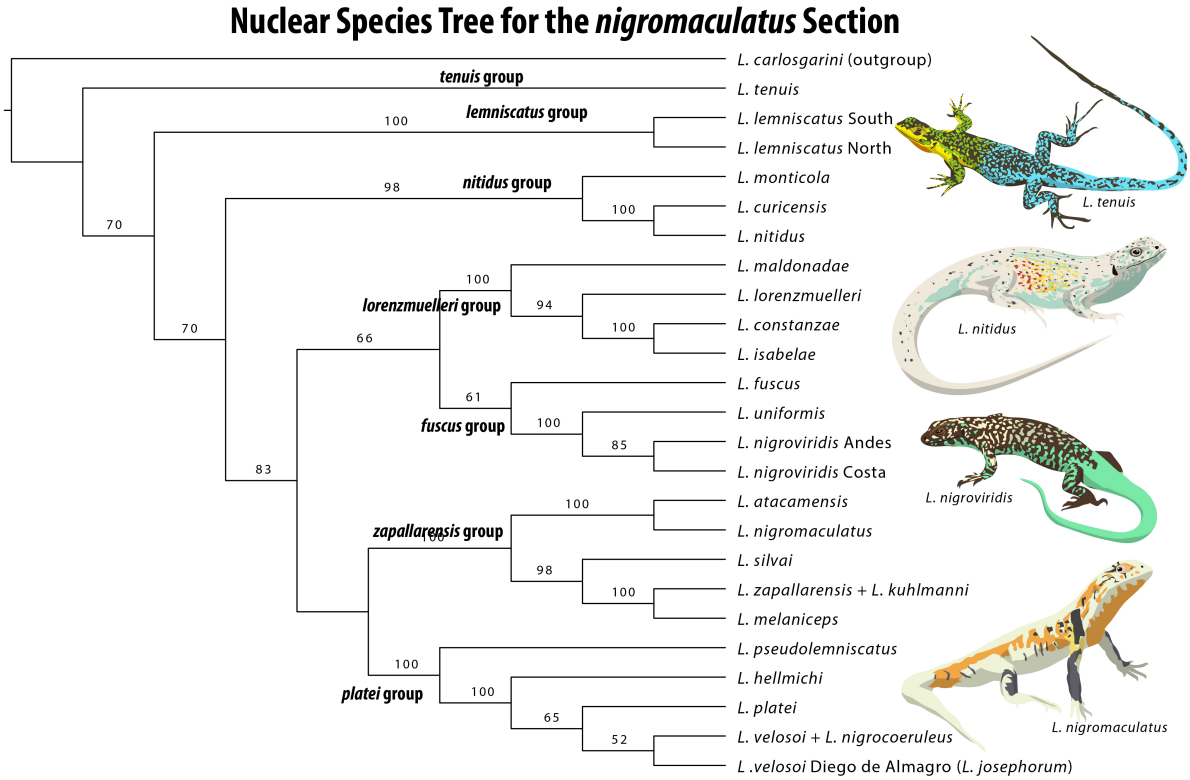

Figure S17. Species tree based on the MSC using the nuclear data for the *chiliensis* section. Large numbers indicate groups as in Table S3. Branch labels indicate bootstrap support.

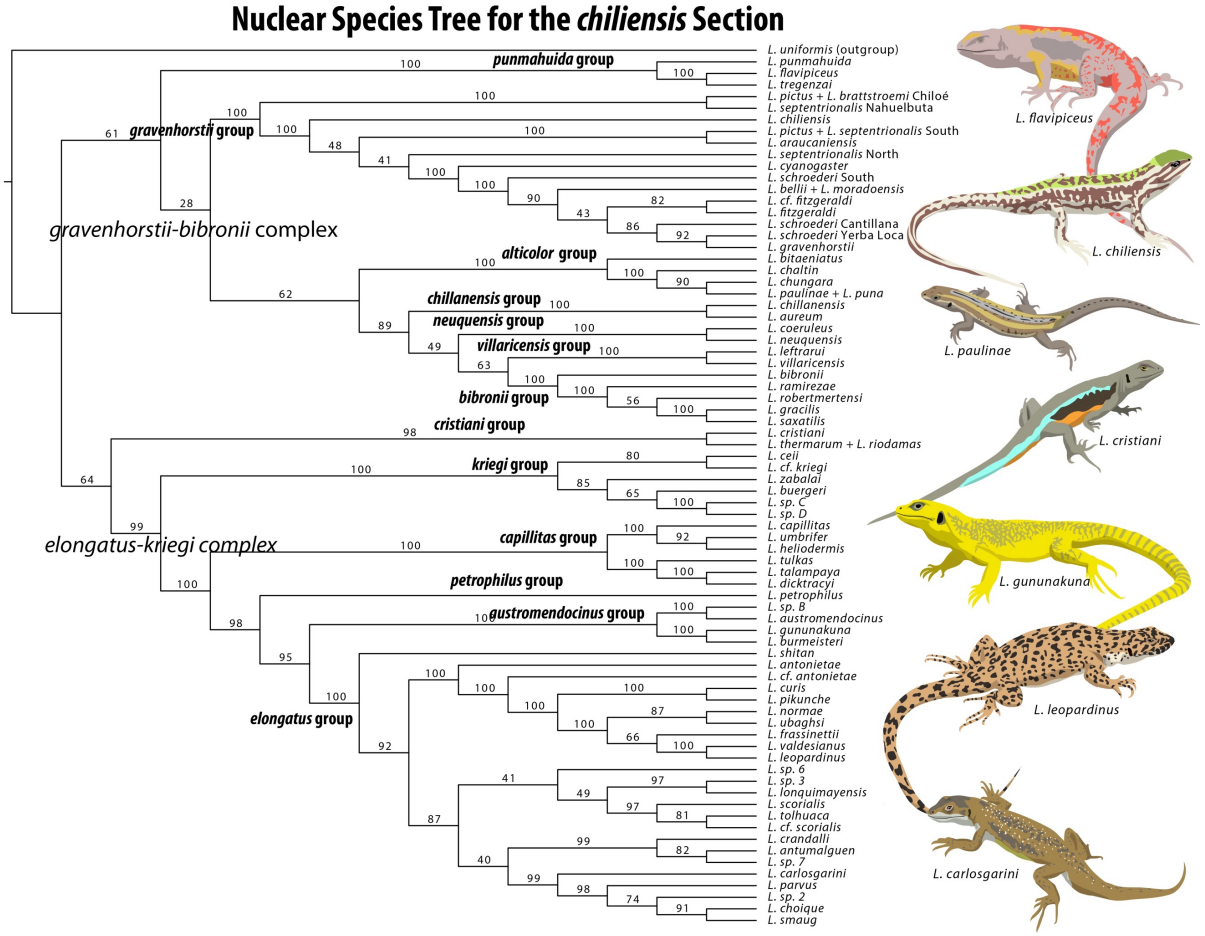

Figure S18. Log-pseudolikelihood plots vs number of maximum hybridization events for each network inferred for each group. Red points indicate networks chosen based on large improvements of pseudolikelihood.

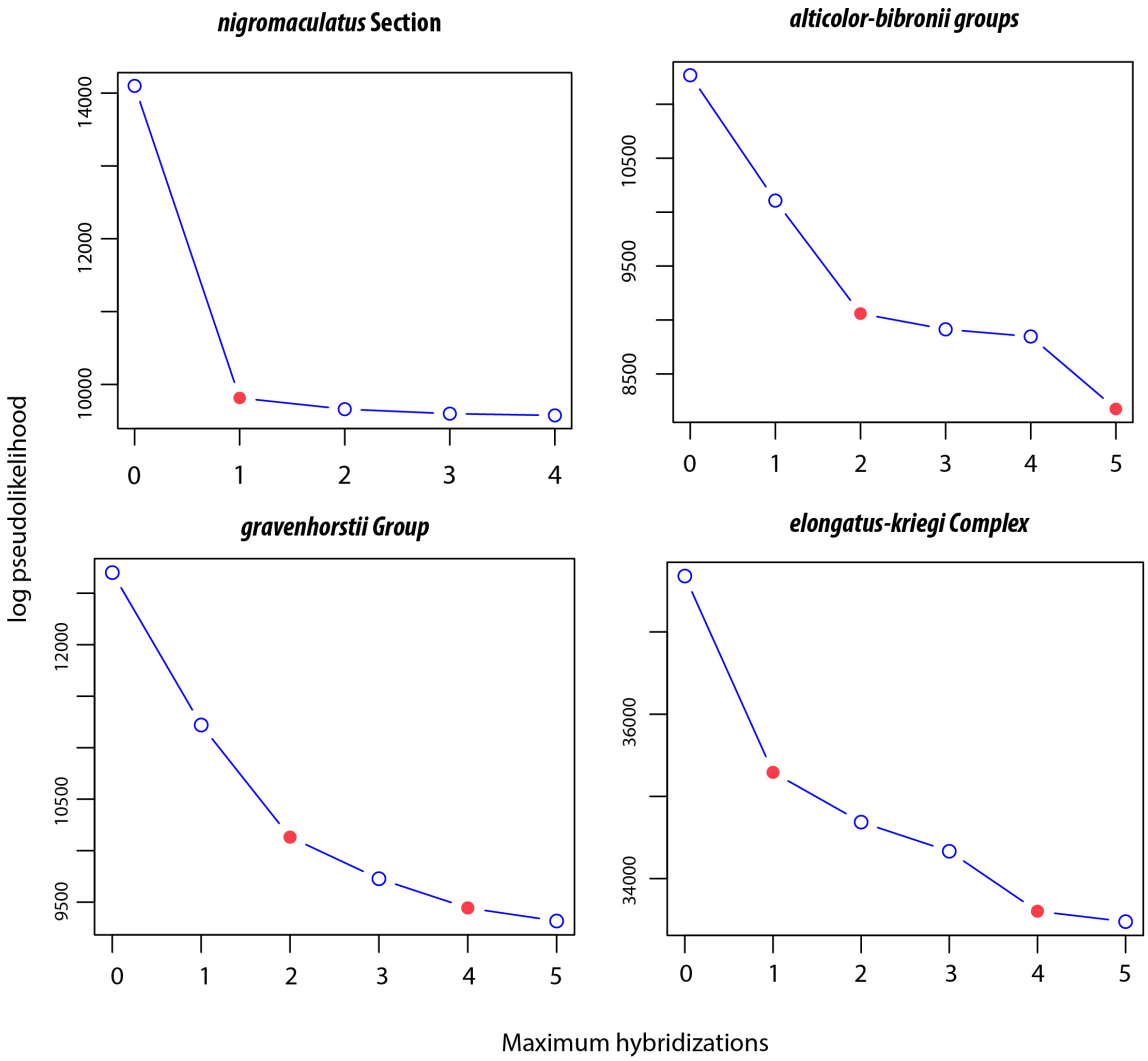

Figure S19. Phylogenetic networks showing probable reticulation events in the different clades of the subgenus *Liolaemus*.

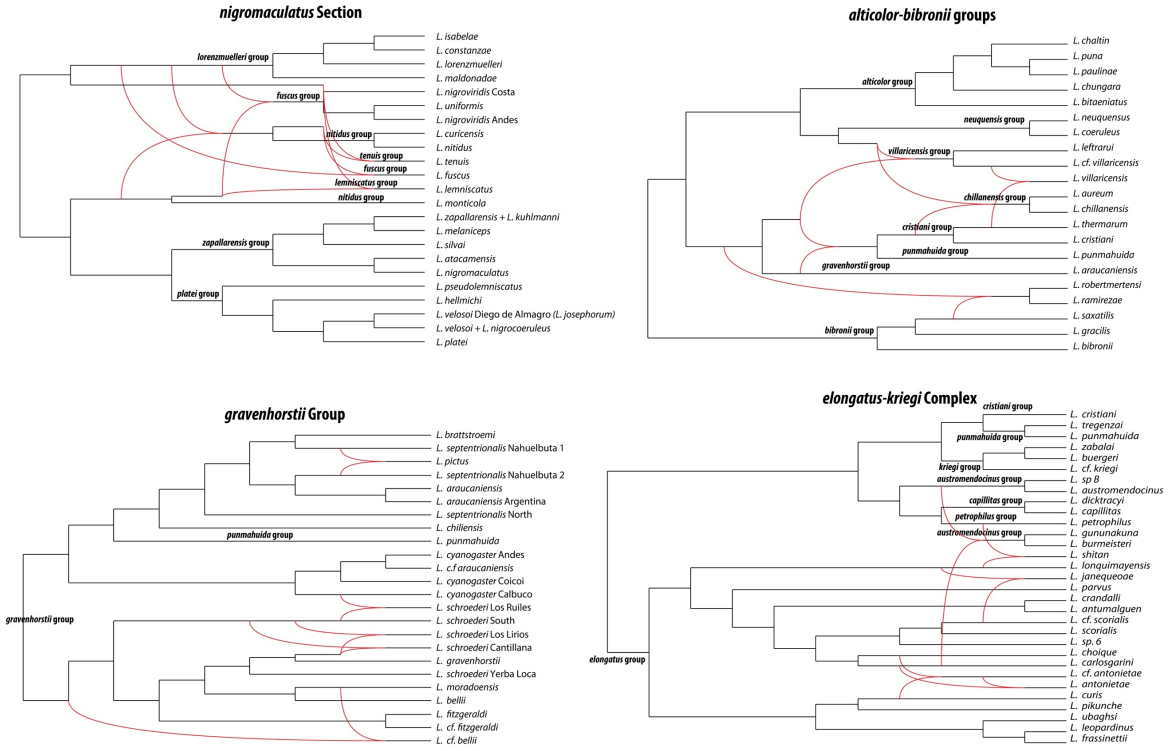

Table S1. Recognised species in the *Liolaemus* (*sensu stricto)* subgenus. Species with a * are not included in the study, and species with ~ are not included in the nuclear sampling.

Liolaemus chiliensis Section

L. absconditus Vega, Quinteros, Stellatelli, Bellagamba, Block & Madrid 2018 *

L. alticolor Barbour 1909 ~

L. antonietae Troncoso-Palacios, Esquerré, Urra, Díaz, Castro-Pastene & Ruiz 2018

L. antumalguen Avila, Morando, Pérez & Sites Jr. 2010

L. aparicioi Ocampo, Aguilar-Kirigin & Quinteros 2012 *

L. araucaniensis Müller & Hellmich 1932

L. austromendocinus Cei 1974

L. aureum Diaz-Vega, Maldonado & Demangel 2018

L. balerion Quinteros, Ruiz-Monachesi & Abdala 2019 ~

L. bellii Gray 1845

L. bibronii (Bell 1843)

L. bitaeniatus Laurent 1984

L. brattstroemi Donoso-Barros 1961; in this study sinonymized with *L. pictus*

L. buergeri Werner 1907

L. burmeisteri Avila, Pérez, Medina, Sites Jr. & Morando 2012

L. capillitas Hulse 1979

L. carlosgarini Esquerré, Núñez & Scolaro 2013

L. ceii Donoso-Barros 1971

L. chaltin Lobo & Espinoza 2004

L. chiliensis (Lesson 1830)

L. chillanensis Müller & Hellmich 1932

L. choique Abdala, Quinteros, Scrocchi & Stazzonelli 2010

L. chungara Quinteros, Valladares, Semham, Acosta, Barrionuevo & Abdala 2014

L. coeruleus Cei & Ortiz-Zapata 1983

L. crandalli Avila, Medina, Pérez, Sites Jr. & Morando 2015

L. cristiani Núñez, Navarro & Loyola 1991

L. curis Núñez & Labra 1985

L. cyaneinotatus Martinez, Avila, Perez, Perez, Sites & Morando 2011 *

L. cyanogaster (Duméril & Bibron 1837)

L. dicktracyi Espinoza & Lobo 2003

L. elongatus Koslowsky 1896 ~

L. exploratorum Cei & Williams 1984 *

L. fitzgeraldi Boulenger 1899

L. flavipiceus Cei & Videla 2003

L. frassinettii Núñez 2007

L. gracilis (Bell 1843)

L. gravenhorstii (Gray 1845)

L. gununakuna Avila, Morando, Pérez & Sites Jr 2004
L. heliodermis Espinoza, Lobo & Cruz 2000
L. incaicus Lobo, Quinteros & Gómez 2007 ~
L. janequeoae Troncoso-Palacios, Díaz, Puas, Riveros-Riffo & Elorza 2016
L. kriegi Müller & Hellmich 1939 ~
L. leftrarui Troncoso-Palacios, Díaz, Puas, Riveros-Riffo & Elorza 2016
L. leopardinus Müller & Hellmich 1932
L. lonquimayensis Escobar-Huerta, Santibáñez-Toro & Ortiz 2015
L. meraxes Quinteros, Ruiz-Monachesi & Abdala 2019 ~
L. moradoensis Hellmich 1950
L. neuquensis Müller & Hellmich 1939
L. normae Esquerré, Ramírez-Álvarez, Pavón-Vázquez, Troncoso-Palacios, Garín, Keogh & Leaché 2019
L. pagaburoi Lobo & Espinoza 1999 *
L. parvus Quinteros, Abdala, Gómez & Scrocchi 2008
L. paulinae Donoso-Barros 1961
L. petrophilus Donoso-Barros & Cei 1971
L. pictus (Duméril & Bibron 1837)
L. pikunche Troncoso-Palacios & Ramírez-Álvarez 2021
L. puna Lobo & Espinoza 2004
L. punmahuida Avila, Pérez & Morando 2003
L. pyriphlogos Quinteros 2012 *
L. quinterosi Ruiz, Quilpidor, Bulacios Arroyo, Chafrat & Abdala 2019
L. ramirezae Lobo & Espinoza 1999
L. riodamas Esquerré, Núñez & Scolaro 2013; in this study sinonymized with *L. thermarum*
L. robertmertensi Hellmich 1964
L. sanjuanensis Cei 1982 *
L. saxatilis Avila & Cei 1992
L. schroederi Müller & Hellmich 1938
L. scorialis Troncoso-Palacios, Díaz, Esquerré & Urra 2015
L. septentrionalis Pincheira-Donoso & Núñez 2005
L. shitan Abdala, Quinteros, Scrocchi & Stazzonelli 2010
L. smaug Abdala, Quinteros, Scrocchi & Stazzonelli 2010
L. talampaya Avila, Morando, Pérez & Sites Jr 2004
L. tandiliensis Vega, Bellagamba & Lobo 2008 *
L. thermarum Videla & Cei 1996
L. tregenzai Pincheira-Donoso & Scolaro 2007
L. tulkas Quinteros, Abdala, Gómez & Scrocchi 2008
L. ubaghsi Esquerré, Troncoso-Palacios, Garín & Núñez 2014
L. umbrifer Espinoza & Lobo 2003
L. valdesianus Hellmich 1950
L. variegatus Laurent 1984 *
L. vhagar Quinteros, Ruiz-Monachesi & Abdala 2019
L. villaricensis Müller & Hellmich 1932

L. yalguaraz Abdala, Quinteros & Sehmam 2015 *

L. yanalcu Martinez Oliver & Lobo 2002 *

L. zabalai Troncoso-Palacios, Díaz, Esquerré & Urra 2015

Liolaemus nigromaculatus Section

L. abdalai Quinteros 2012 *

L. atacamensis Müller & Hellmich 1933

L. confusus Núñez & Pincheira-Donoso 2006 ~

L. constanzae Donoso-Barros 1961

L. curicensis Müller & Hellmich 1938

L. fuscus Boulenger 1885

L. hellmichi Donoso-Barros 1975

L. isabelae Navarro & Núñez 1993

L. juanortizi Young-Downey & Moreno 1992 *

L. kuhlmanni Müller & Hellmich 1933; in this study sinonymized with *L. zapallarensis*

L. lemniscatus Gravenhorst 1838

L. lorenzmuelleri Hellmich 1950

L. maldonadae Núñez, Navarro & Loyola 1991

L. melaniceps Pincheira-Donoso & Núñez 2005

L. melanopleurus (Philippi 1860) *

L. monticola Müller & Hellmich 1932

L. nigrocoeruleus Marambio-Alfaro & Troncoso-Palacios 2014; in this study sinonymized with *L. velosoi*

L. nigromaculatus (Wiegmann 1834)

L. nigroviridis Müller & Hellmich 1932

L. nitidus (Wiegmann 1834)

L. platei Werner 1898

L. pseudolemniscatus Lamborot & Ortiz 1990

L. silvai Ortiz 1989

L. tenuis (Duméril & Bibron 1837)

L. uniformis Troncoso-Palacios, Elorza, Puas & Alfaro-Pardo 2016

L. velosoi Ortiz 1987

L. zapallarensis Müller & Hellmich 1933

Table S2. Samples used in this study. Localities with asterisk correspond to type localities, and with two asterisks to close to type locality. Species with another name in parenthesis correspond to samples from localities where a currently invalid subspecies or species that sample belonged to.

Voucher	Species	Section	Locality	Region/Province	Country	Latitude	Longitude	Origin
MNHN 3669	*alticolor*	*chiliensis*	S de Caquena, Putre	Arica & Parinacota	Chile	-18.0606	-69.2058	From this study
MUSM 29159	*alticolor*	*chiliensis*	Desaguadero**	Puno	Peru	-16.5500	-69.0333	Genbank
MUSM 31393	*alticolor*	*chiliensis*	Yunguyo**	Puno	Peru	-16.2333	-69.0833	Genbank
JTP 188	*antonietae*	*chiliensis*	Termas de Chillan*	Biobío	Chile	-36.9000	-71.4000	From this study
JTP 194	*antonietae*	*chiliensis*	Termas de Chillan*	Biobío	Chile	-36.9000	-71.4000	From this study
LJAMM 14043	*antonietae*	*chiliensis*	Termas de Chillan*	Biobío	Chile	-36.9046	-71.4100	From this study
JTP 243	*antonietae*	*chiliensis*	Shangrila	Maule	Chile	-36.8667	-71.4667	From this study
LJAMM 6167	*antumalguen*	*chiliensis*	around Chadileu Creek, eastern piedmont of Domuyo volcano, Chos Malal**	Neuquén	Argentina	-36.6167	-70.6333	GenBank
LJAMM 6173	*antumalguen*	*chiliensis*	Volcan Domuyo, Chos Malal*	Neuquén	Argentina	-36.6500	-70.3333	From this study
LJAMM 6174	*antumalguen*	*chiliensis*	Volcan Domuyo, Chos Malal*	Neuquén	Argentina	-36.6500	-70.3333	From this study
SSUC 0012	*araucaniensis*	*chiliensis*	Quetrupillan, Temuco	Araucanía	Chile	-39.5167	-71.6833	From this study
SSUC 0013	*araucaniensis*	*chiliensis*	Quetrupillan, Temuco	Araucanía	Chile	-39.5167	-71.6833	From this study
SSUC 0018	*araucaniensis*	*chiliensis*	Volcán Villarrica*	Araucanía	Chile	-39.3667	-71.9333	From this study
SSUC 0020	*araucaniensis*	*chiliensis*	Volcán Villarrica*	Araucanía	Chile	-39.3667	-71.9333	From this study
DD 066	*araucaniensis*	*chiliensis*	Volcan Villarrica*	Araucanía	Chile	-39.3667	-71.9333	From this study
LJAMM 12979	*araucaniensis*	*chiliensis*	Rio Hermoso, Lacar	Neuquén	Argentina	-40.3264	-71.3867	From this study
LJAMM 12980	*araucaniensis*	*chiliensis*	Rio Hermoso, Lacar	Neuquén	Argentina	-40.3264	-71.3867	From this study
DE 420	*aureum*	*chiliensis*	Quebrada Copahue*	Biobío	Chile	-37.8167	-71.1500	From this study
DE 437	*aureum*	*chiliensis*	Quebrada Copahue*	Biobío	Chile	-37.8167	-71.1500	From this study
LJAMM 2716	*austromendocinus*	*chiliensis*	9.5 Km N El Nihuil, San Rafael	Mendoza	Argentina	-34.9913	-68.6233	GenBank
LJAMM 5147	*austromendocinus*	*chiliensis*	12.4 Km S La Matancilla, Provincial Road 180, Malargüe	Mendoza	Argentina	-36.8180	-68.9858	GenBank
LJAMM 10574	*austromendocinus*	*chiliensis*	2.5 km S Arroyo Hondo, Provincial Road 101, La Faja, San Carlos	Mendoza	Argentina	-34.5388	-69.2656	GenBank
LJAMM 16405	*austromendocinus*	*chiliensis*	Ruta Provincial 180, 23 km NE empalme Ruta Provincial 186, Mina Ethel, 8km S Puesto Marfil, Malargue*	Mendoza	Argentina	-35.9294	-68.6165	From this study
LJAMM 16406	*austromendocinus*	*chiliensis*	Ruta Provincial 180, 23 km NE empalme Ruta Provincial 186, Mina Ethel, 8km S Puesto Marfil, Malargue*	Mendoza	Argentina	-35.9294	-68.6165	From this study
LJAMM 5575	*balerion*	*chiliensis*	R. Nac. 23, 10 Km W Ing. Jacobacci	Rio Negro	Argentina	-41.3378	-69.695	Genbank
SSUC 0204	*bellii*	*chiliensis*	Casa de Piedra, Camino Valle Nevado, Farellones**	Metropolitana	Chile	-33.3500	-70.2833	From this study
JTP 019	*bellii*	*chiliensis*	Cerro San Ramon	Metropolitana	Chile	-33.4833	-70.3833	From this study
SSUC 0202	*bellii*	*chiliensis*	Casa de Piedra, Camino Valle Nevado, Farellones**	Metropolitana	Chile	-33.3500	-70.2833	From this study
SSUC 0400	*bellii*	*chiliensis*	Rio Olivares	Metropolitana	Chile	-33.3833	-70.1167	From this study
SSUC 0401	*bellii*	*chiliensis*	Rio Olivares	Metropolitana	Chile	-33.3833	-70.1167	From this study
SSUCRe 654	*bellii*	*chiliensis*	Lagunillas	Metropolitana	Chile	-33.6008	-70.2869	From this study
SSUCRe 656	*bellii*	*chiliensis*	Lagunillas	Metropolitana	Chile	-33.6008	-70.2869	From this study
SSUC 0208	*bellii*	*chiliensis*	El Colorado, Farellones**	Metropolitana	Chile	-33.3333	-70.2833	Genbank
SSUC 0209	*bellii*	*chiliensis*	El Colorado, Farellones**	Metropolitana	Chile	-33.3333	-70.2833	Genbank
DD 023	*bibronii*	*chiliensis*	Chile Chico	Aysén	Chile	-46.5378	-71.6761	From this study
DD 030	*bibronii*	*chiliensis*	Puerto Ibañez	Aysén	Chile	-46.2942	-71.9328	From this study
LJAMM 9895	*bibronii*	*chiliensis*	5.5. km N Puerto Deseado*	Santa Cruz	Argentina	-47.7150	-65.8392	From this study
LJAMM 9896	*bibronii*	*chiliensis*	5.5. km N Puerto Deseado*	Santa Cruz	Argentina	-47.7150	-65.8392	From this study
LJAMM 5406	*bibronii_1*	*chiliensis*	R. Pcial 4. 0.8 Km E Gan Gan, Telsen	Chubut	Argentina	-42.5264	-68.2581	Genbank
LJAMM 5601	*bibronii_1*	*chiliensis*	R. Pcial. 4. 41.6 Km W Telsen	Chubut	Argentina	-42.3683	-67.4019	Genbank
LJAMM 5340	*bibronii_10*	*chiliensis*	23.9 Km SE Loncopue, R. Pcial 33	Neuquén	Argentina	-38.1408	-70.4439	GenBank
LJAMM 5341	*bibronii_10*	*chiliensis*	23.9 Km SE Loncopue, R. Pcial 33	Neuquén	Argentina	-38.1408	-70.4439	GenBank
LJAMM 5395	*bibronii_12*	*chiliensis*	R. Pcial. 46. 22 Km SW Zapala	Neuquén	Argentina	-39.0436	-70.2228	GenBank
LJAMM 5396	*bibronii_12*	*chiliensis*	R. Pcial. 46. 22 Km SW Zapala	Neuquén	Argentina	-39.0436	-70.2228	GenBank
LJAMM 933	*bibronii_5*	*chiliensis*	R. Pcial. 23. 8 Km N Pilolil, Catan Lil	Neuquén	Argentina	-39.5414	-70.9558	Genbank
LJAMM 15635	*bitaeniatus*	*chiliensis*	Ruta Provincial 1, 400 m empalme Ruta Provincial 48, 6 km N Condor Huasi, vado río Pucara, Andalgalá	Catamarca	Argentina	-27.5401	-66.0302	From this study

LJAMM 15636	*bitaeniatus*	*chiliensis*	Ruta Provincial 1, 400 m empalme Ruta Provincial 48, 6 km N Condor Huasi, vado río Pucara, Andalgalá	Catamarca	Argentina	-27.5401	-66.0302	From this study
DD 006	*brattstroemi*	*chiliensis*	Lechagua*	Los Lagos	Chile	-41.8861	-73.8508	From this study
SSUC 0451	*brattstroemi*	*chiliensis*	El Quilar, Chiloé**	Los Lagos	Chile	-41.8667	-73.8167	From this study
SSUC 0172	*buergeri*	*chiliensis*	Laguna del Maule	Maule	Chile	-36.0000	-70.3833	From this study
CG 001	*buergeri*	*chiliensis*	Rio Puelche	Maule	Chile	-35.8333	-70.5667	From this study
CG 002	*buergeri*	*chiliensis*	Rio Puelche	Maule	Chile	-35.8333	-70.5667	From this study
JTP 151	*buergeri*	*chiliensis*	Altos de Lircay	Maule	Chile	-35.6000	-70.9667	From this study
SSUC 0173	*buergeri*	*chiliensis*	Laguna del Maule	Maule	Chile	-36.0000	-70.3833	From this study
SSUC 0434	*buergeri*	*chiliensis*	Volcán El Planchón*	Maule	Chile	-35.1500	-70.5333	From this study
SSUC 0435	*buergeri*	*chiliensis*	Volcán El Planchón*	Maule	Chile	-35.1500	-70.5333	From this study
SSUC 0437	*buergeri*	*chiliensis*	Volcán El Planchón*	Maule	Chile	-35.1500	-70.5333	From this study
SSUC 0489	*buergeri*	*chiliensis*	Altos de Lircay, Talca	Maule	Chile	-35.6000	-70.9667	From this study
LJAMM 14122	*buergeri*	*chiliensis*	Ruta J-585, Camino a El Planchon, 6.3 km empalme ruta Pichuante-Paso Vergara**	Maule	Chile	-35.1356	-70.5162	From this study
LJAMM 5313	*buergeri*	*chiliensis*	14 Km S Aguas Calientes, Minas	Neuquén	Argentina	-36.7281	-70.6251	GenBank
LJAMM 6413	*buergeri*	*chiliensis*	Arroyo Domuyo, Minas	Neuquén	Argentina	-36.6462	-70.3612	GenBank
LJAMM 6439	*buergeri*	*chiliensis*	near Puente de Carrizo, Arroyo Covunco, Minas	Neuquén	Argentina	-36.6892	-70.5407	GenBank
LJAMM 7637	*burmeisteri*	*chiliensis*	Ruta Provincial 41, 6.5 km S Caepe Malal, Chos Malal*	Neuquén	Argentina	-37.2309	-70.3734	GenBank
LJAMM 7644	*burmeisteri*	*chiliensis*	Ruta Provincial 41, 6.5 km S Caepe Malal, Chos Malal*	Neuquén	Argentina	-37.2309	-70.3734	GenBank
LJAMM 7646	*burmeisteri*	*chiliensis*	Ruta Provincial 41, 6.5 km S Caepe Malal, Chos Malal*	Neuquén	Argentina	-37.2309	-70.3734	From this study
LJAMM 7647	*burmeisteri*	*chiliensis*	Ruta Provincial 41, 6.5 km S Caepe Malal, Chos Malal*	Neuquén	Argentina	-37.2309	-70.3734	From this study
LJAMM 2788	*capillitas*	*chiliensis*	between Km 34 and Km 39, Provincial Road 47, Andalgalá*	Catamarca	Argentina	-27.4206	-66.414	GenBank
LJAMM 2789	*capillitas*	*chiliensis*	between Km 34 and Km 39, Provincial Road 47, Andalgalá*	Catamarca	Argentina	-27.4206	-66.414	GenBank
LJAMM 16448	*capillitas*	*chiliensis*	1 km W Hosteria Refugio del Minero, 2.16 km SE Ruta Provincial 47, entre Andalgala y Minas Capillitas, Distrito Minas, Andalgalá*	Catamarca	Argentina	-27.3546	-66.3863	From this study
LJAMM 16449	*capillitas*	*chiliensis*	1 km W Hosteria Refugio del Minero, 2.16 km SE Ruta Provincial 47, entre Andalgala y Minas Capillitas, Distrito Minas, Andalgalá*	Catamarca	Argentina	-27.3546	-66.2053	From this study
SSUC 0186	*carlosgarini*	*chiliensis*	camino a Laguna del Maule**	Maule	Chile	-36.0167	-70.5621	From this study
SSUC 0188	*carlosgarini*	*chiliensis*	camino a Laguna del Maule**	Maule	Chile	-36.0167	-70.5621	From this study
MNHN 4562	*carlosgarini*	*chiliensis*	Laguna del Maule*	Maule	Chile	-35.9903	-70.5561	From this study
MNHN 4563	*carlosgarini*	*chiliensis*	Laguna del Maule*	Maule	Chile	-35.9903	-70.5561	From this study
MNHN 4564	*carlosgarini*	*chiliensis*	Laguna del Maule*	Maule	Chile	-35.9903	-70.5561	From this study
LJAMM 14069	*carlosgarini*	*chiliensis*	Laguna del Maule*	Maule	Chile	-36.0167	-70.5621	From this study
LJAMM 14070	*carlosgarini*	*chiliensis*	Laguna del Maule*	Maule	Chile	-36.0167	-70.5621	From this study
LJAMM 2613	*ceii*	*chiliensis*	Pampas de Lonco Luan, Picunches*	Neuquén	Argentina	-38.9040	-70.8553	Genbank
LJAMM 13870	*ceii*	*chiliensis*	Pampas de Lonco Luan, Picunches*	Neuquén	Argentina	-38.9040	-70.8553	Genbank
LJAMM 13881	*ceii*	*chiliensis*	Ruta Provincial 13, Pampas de Lonco Luan, Pincunches*	Neuquén	Argentina	-38.9040	-70.8553	From this study
LJAMM 13881	*ceii*	*chiliensis*	Ruta Provincial 13, Pampas de Lonco Luan, Pincunches*	Neuquén	Argentina	-38.9040	-70.8553	From this study
JTP 153	*cf. antonietae*	*chiliensis*	Altos de Lircay	Maule	Chile	-35.6000	-70.9667	From this study
SSUC 0496	*cf. antonietae*	*chiliensis*	Camino a Cerro El Peine, Altos de Lircay	Maule	Chile	-35.6000	-70.9667	From this study
DE 452	*cf. antonietae*	*chiliensis*	El Melado	Maule	Chile	-35.8667	-70.9833	From this study
DE 453	*cf. antonietae*	*chiliensis*	Altos de Lircay	Maule	Chile	-35.6000	-70.9667	From this study
LJAMM 14079	*cf. antonietae*	*chiliensis*	Cerro El Peine, Parque Nacional Altos del Lircay	Maule	Chile	-35.5994	-71.0446	From this study
LJAMM 14080	*cf. antonietae*	*chiliensis*	Cerro El Peine, Parque Nacional Altos del Lircay	Maule	Chile	-35.5994	-71.0446	From this study
SSUCRe 673	*cf. araucaniensis*	*chiliensis*	Fundo La Paloma, Malalcahuello	Araucanía	Chile	-38.4667	-71.5333	From this study
DE 417	*cf. araucaniensis*	*chiliensis*	Nahuelbuta	Biobío	Chile	-37.7833	-72.9833	From this study
DE 435	*cf. araucaniensis*	*chiliensis*	Alto Biobio	Biobío	Chile	-37.9167	-71.5667	From this study
BS 2 (JTP)	*cf. bellii*	*chiliensis*	Sewell	O'Higgins	Chile	-34.0667	-70.3500	From this study
DD 073	*cf. bellii*	*chiliensis*	Chapa Verde	O'Higgins	Chile	-34.0500	-70.4333	From this study
DD 002	*cf. fitzgeraldi*	*chiliensis*	Alcohuaz	Coquimbo	Chile	-30.3972	-70.4031	From this study
SSUC 657	*cf. kriegi*	*chiliensis*	paso Piedras Blancas	Araucanía	Chile	-38.5316	-71.0129	From this study
SSUC 659	*cf. kriegi*	*chiliensis*	Laguna Verde, paso Piedras Blancas	Araucanía	Chile	-38.5282	-70.9947	From this study

SSUC 660	*cf. kriegi*	*chiliensis*	Laguna Verde, paso Piedras Blancas	Araucanía	Chile	-38.5282	-70.9947	From this study
DE 412	*cf. scorialis*	*chiliensis*	Laguna la Mula	Biobío	Chile	-37.8833	-71.3667	From this study
DE 419	*cf. scorialis*	*chiliensis*	Laguna la Mula	Biobío	Chile	-37.8833	-71.3667	From this study
DD 024	*cf. villaricensis*	*chiliensis*	Volcán Lonquimay	Araucanía	Chile	-38.3936	-71.6186	From this study
LJAMM 12010	*chaltin*	*chiliensis*	Ruta Provincial 7, camino a Laguna de Pozuelos, 4.2 km NW Abra Pampa, Cochinoca*	Jujuy	Argentina	-22.6974	-65.7251	From this study
LJAMM 12016	*chaltin*	*chiliensis*	Ruta Nacional 40, 1.4 km SW empalme Ruta Nacional 9, 9.4 km S Abra Pampa, Cochinoca*	Jujuy	Argentina	-22.8048	-65.7113	From this study
LJAMM 16050	*chaltin*	*chiliensis*	Ruta Provincial 7, 6 km NW Abra Pampa, Cochinoca*	Jujuy	Argentina	-22.6898	-65.7407	From this study
LJAMM 16050	*chaltin*	*chiliensis*	Ruta Provincial 7, 6 km NW Abra Pampa, Cochinoca*	Jujuy	Argentina	-22.6898	-65.7407	From this study
DE 09	*chiliensis*	*chiliensis*	Paso Pino Hachado	Araucanía	Chile	-38.6372	-70.9687	From this study
DE 12	*chiliensis*	*chiliensis*	Fundo La Paloma, Malalcahuello	Araucanía	Chile	-38.4667	-71.5333	From this study
DE 13	*chiliensis*	*chiliensis*	Fundo La Paloma, Malalcahuello	Araucanía	Chile	-38.4667	-71.5333	From this study
DE 15	*chiliensis*	*chiliensis*	Los Paraguas, Conguillio	Araucanía	Chile	-38.6644	-70.8239	From this study
DE 414	*chiliensis*	*chiliensis*	Ralco	Biobío	Chile	-37.8667	-71.6333	From this study
JTP 269	*chiliensis*	*chiliensis*	Trapa-Trapa	Biobío	Chile	-37.7333	-71.2167	From this study
SSUC 0152	*chiliensis*	*chiliensis*	Nahuelbuta	Biobío	Chile	-38.6167	-73.4667	From this study
Uconf 362	*chiliensis*	*chiliensis*	Termas de Chillan	Biobío	Chile	-36.5333	-71.9500	GenBank
E11CHTR08	*chiliensis*	*chiliensis*	Las Trancas	Biobío	Chile	-36.8833	-71.5667	GenBank
MNHN 4266	*chiliensis*	*chiliensis*	Guaiquivilo-Melado, Colbún, Linares	Maule	Chile	-36.3303	-70.7772	From this study
LJAMM 14360	*chiliensis*	*chiliensis*	Lago Lolog, Huiliches	Neuquén	Argentina	-40.0731	-71.3163	Genbank
LJAMM 14361	*chiliensis*	*chiliensis*	Chapelco Ranch, Lacar	Neuquén	Argentina	-40.2504	-71.2686	Genbank
LJAMM 14362	*chiliensis*	*chiliensis*	Ruca Hue, San Martin de los Andes, Lacar	Neuquén	Argentina	-40.1667	-71.3500	From this study
SSUC 0153	*chiliensis*	*chiliensis*	Cerro Los Robles, Lolol	O'Higgins	Chile	-34.7500	-71.7833	From this study
SSUC 0154	*chiliensis*	*chiliensis*	Cerro Los Robles, Lolol	O'Higgins	Chile	-34.7500	-71.7833	From this study
SSUC 0156	*chiliensis*	*chiliensis*	Cerro El Manzano	O'Higgins	Chile	-33.4000	-70.4000	From this study
JTP 223	*chillanensis*	*chiliensis*	Termas de Chillan*	Biobío	Chile	-36.9000	-71.4000	From this study
JTP 245	*chillanensis*	*chiliensis*	Shangrila	Biobío	Chile	-36.4167	-71.4667	From this study
LJAMM 14044	*chillanensis*	*chiliensis*	Termas de Chillan*	Biobío	Chile	-36.9046	-71.4100	From this study
LJAMM 7771	*choique*	*chiliensis*	Ruta Provincial 221, 12 km N Calmuco, Malargüe*	Mendoza	Argentina	-36.4300	-69.8028	From this study
LJAMM 7772	*choique*	*chiliensis*	Ruta Provincial 221, 12 km N Calmuco, Malargüe*	Mendoza	Argentina	-36.4300	-69.8028	From this study
DD 007	*chungara*	*chiliensis*	Parinacota	Arica y Parinacota	Chile	-18.1994	-69.2694	From this study
DD 025	*chungara*	*chiliensis*	Putre*	Arica y Parinacota	Chile	-18.1806	-69.5303	From this study
DD 039	*chungara*	*chiliensis*	Entrada a Putre*	Arica y Parinacota	Chile	-18.1806	-69.5303	From this study
DD 044	*chungara*	*chiliensis*	Parinacota	Arica y Parinacota	Chile	-18.1994	-69.2694	From this study
DD 031	*coeruleus*	*chiliensis*	Pino Hachado**	Araucanía	Chile	-38.6331	-70.9647	From this study
DD 038	*coeruleus*	*chiliensis*	Pino Hachado**	Araucanía	Chile	-38.6331	-70.9647	From this study
LJAMM 12220	*crandalli*	*chiliensis*	Natural Protected Area Auca Mahuida, Pehuenches*	Neuquén	Argentina	-37.7018	-68.8580	Genbank
LJAMM 12225	*crandalli*	*chiliensis*	Natural Protected Area Auca Mahuida, Pehuenches*	Neuquén	Argentina	-37.7018	-68.8580	Genbank
LJAMM 14566	*crandalli*	*chiliensis*	Auca Mahuida, Riscos Altos, RiAl-X1, Añelo*	Neuquén	Argentina	-37.7595	-68.9342	From this study
LJAMM 14582	*crandalli*	*chiliensis*	Auca Mahuida, camino entre VAM-2 y VAM-6, 1 km W VAM-2*	Neuquén	Argentina	-37.6972	-68.8888	From this study
JTP 028	*cristiani*	*chiliensis*	Cerro El Peine*	Maule	Chile	-35.6167	-71.0333	From this study
JTP 289	*cristiani*	*chiliensis*	Radal Siete Tazas	Maule	Chile	-35.4833	-70.8667	From this study
SSUC 0537	*cristiani*	*chiliensis*	Cerro El Peine*	Maule	Chile	-35.6167	-71.0333	From this study
DE 428	*cristiani*	*chiliensis*	Alto Huemul	O'Higgins	Chile	-34.8667	-70.6500	From this study
SSUC 0167	*curis*	*chiliensis*	Termas del Flaco*	O'Higgins	Chile	-34.9500	-70.4167	From this study
SSUC 0168	*curis*	*chiliensis*	Termas del Flaco*	O'Higgins	Chile	-34.9500	-70.4167	From this study
DD 018	*curis*	*chiliensis*	Rio Las Damas**	O'Higgins	Chile	-34.8883	-70.3150	From this study
MNHN 4681	*curis*	*chiliensis*	Rio Las Damas**	O'Higgins	Chile	-34.9500	-70.4000	From this study
SSUC 0495	*curis*	*chiliensis*	Termas del Flaco*	O'Higgins	Chile	-34.9500	-70.4167	From this study
SSUC 0165	*cyanogaster*	*chiliensis*	Entre Coi Coi y Champulli	Araucanía	Chile	-38.6167	-73.4500	From this study
SSUCRe 667	*cyanogaster*	*chiliensis*	Cumbre Batea-Mahuida	Araucanía	Chile	-38.7977	-71.1816	From this study
JTP 267	*cyanogaster*	*chiliensis*	Trapa-Trapa	Biobío	Chile	-37.7333	-71.2167	From this study

DE 451	*cyanogaster*	*chiliensis*	Ralco	Biobío	Chile	-37.9000	-71.6167	From this study
CG 006	*cyanogaster*	*chiliensis*	Peninsula Guabún, Isla de Chiloé	Los Lagos	Chile	-41.7953	-74.0220	From this study
DD 008	*cyanogaster*	*chiliensis*	Calbuco	Los Lagos	Chile	-41.7658	-73.1833	From this study
DD 021	*cyanogaster*	*chiliensis*	Calbuco	Los Lagos	Chile	-41.7658	-73.1833	From this study
DD 040	*cyanogaster*	*chiliensis*	Calbuco	Los Lagos	Chile	-41.7658	-73.1833	From this study
LJAMM 5816	*dicktracyi*	*chiliensis*	24 km NW Alto del Carrizal, Famatina**	La Rioja	Argentina	-28.9296	-67.6786	Genbank
LJAMM 5750	*dicktracyi*	*chiliensis*	24 km NW Alto del Carrizal, Famatina**	La Rioja	Argentina	-28.9296	-67.6786	Genbank
LJAMM 15746	*dicktracyi*	*chiliensis*	Camino a Mina La Mejicana, 7 km S puesto Los Berros, Famatina*	La Rioja	Argentina	-28.9382	-67.6801	From this study
LJAMM 15748	*dicktracyi*	*chiliensis*	Camino a Mina La Mejicana, 7 km S puesto Los Berros, Famatina*	La Rioja	Argentina	-28.9382	-67.6801	From this study
LJAMM 2128	*elongatus*	*chiliensis*	National Road 40, Km 1530, 17 Km S Esquel**	Chubut	Argentina	-42.9503	-71.2178	Genbank
LJAMM 9060	*elongatus*	*chiliensis*	Provincial Road 23, 87.8 km SE junction Provincial Road 20, Sarmiento**	Chubut	Argentina	-44.7395	-69.6081	Genbank
LJAMM 9100	*elongatus*	*chiliensis*	Provincial Road 24, 110 km S Paso de Indios**	Chubut	Argentina	-44.5173	-69.1905	Genbank
LJAMM 3675	*elongatus*	*chiliensis*	Provincial Road 15, 1.2 km W junction National Road 40, Cushamen	Chubut	Argentina	-42.3733	-71.1283	Genbank
LJAMM 3578	*elongatus*	*chiliensis*	Provincial Road 17, 8.8 km SE Corcovado	Chubut	Argentina	-43.5057	-71.3956	Genbank
LJAMM 3046	*elongatus*	*chiliensis*	Provincial Road 20, 23 Km W Los Manantiales, Río Senguer	Chubut	Argentina	-45.7112	-70.2636	Genbank
LJAMM 3492	*elongatus*	*chiliensis*	Provincial Road 40, 2.5 km N de Chenqueniyen, Ñorquinco	Río Negro	Argentina	-41.5617	-70.6773	Genbank
SSUC 0216	*fitzgeraldi*	*chiliensis*	Laguna del Inca**	Valparaíso	Chile	-32.8311	-70.1344	From this study
SSUC 0212	*fitzgeraldi*	*chiliensis*	Laguna del Inca**	Valparaíso	Chile	-32.8311	-70.1344	From this study
SSUC 0396	*fitzgeraldi*	*chiliensis*	El Juncal**	Valparaíso	Chile	-32.8500	-70.1500	From this study
SSUC 0397	*fitzgeraldi*	*chiliensis*	El Juncal**	Valparaíso	Chile	-32.8500	-70.1500	From this study
DD 034	*fitzgeraldi*	*chiliensis*	Portillo**	Valparaíso	Chile	-32.8500	-70.1333	From this study
DD 049	*fitzgeraldi*	*chiliensis*	Portillo**	Valparaíso	Chile	-32.8500	-70.1333	From this study
DE 446	*flavipiceus*	*chiliensis*	Laguna del Maule**	Maule	Chile	-36.0000	-70.5500	From this study
MNHN 4304	*flavipiceus*	*chiliensis*	Aguas abajo Laguna del Maule **	Maule	Chile	-36.0118	-70.5627	From this study
MNHN 4305	*flavipiceus*	*chiliensis*	Laguna del Maule**	Maule	Chile	-36.0118	-70.5627	From this study
SSUC 170	*flavipiceus*	*chiliensis*	Laguna del Maule**	Maule	Chile	-36.0097	-70.5640	From this study
DD 069	*frassinettii*	*chiliensis*	Altos de Cantillana*	Metropolitana	Chile	-33.9500	-70.9667	From this study
MNHN 4140	*frassinettii*	*chiliensis*	Altos de Cantillana*	Metropolitana	Chile	-33.8994	-70.9547	From this study
MNHN 4141	*frassinettii*	*chiliensis*	Altos de Cantillana*	Metropolitana	Chile	-33.8994	-70.9547	From this study
SSUC 0080	*frassinettii*	*chiliensis*	Altos de Cantillana*	Metropolitana	Chile	-33.9500	-70.9667	From this study
LJAMM 2620	*gracilis*	*chiliensis*	R. Pcial. 42 11 Km NE Pto. Madryn. El Doradillo	Chubut	Argentina	-42.6569	-64.9922	Genbank
LJAMM 2572	*gracilis*	*chiliensis*	Las Grutas, Playa Piedra Colorada	Río Negro	Argentina	-40.8406	-65.1178	Genbank
LJAMM 14374	*gracilis*	*chiliensis*	Sierras Grandes, Dunas sobre la costa N de la desembocadura de arroyo Salado, Balneario El Salado (Playas Doradas), San Antonio	Río Negro	Argentina	-41.6109	-65.0221	From this study
LJAMM 14375	*gracilis*	*chiliensis*	Sierras Grandes, Dunas sobre la costa N de la desembocadura de arroyo Salado, Balneario El Salado (Playas Doradas), San Antonio	Río Negro	Argentina	-41.6109	-65.0221	From this study
JTP 229	*gravenhorstii*	*chiliensis*	Nos	Metropolitana	Chile	-33.6333	-70.7000	From this study
JTP 236	*gravenhorstii*	*chiliensis*	Noviciado	Metropolitana	Chile	-33.3833	-70.8833	From this study
JTP 271	*gravenhorstii*	*chiliensis*	Isla de Maipo	Metropolitana	Chile	-33.7333	-70.9000	From this study
LG 5	*gravenhorstii*	*chiliensis*	Melipilla	Metropolitana	Chile	-33.6833	-71.2000	From this study
LJAMM 2690	*gununakuna*	*chiliensis*	2 km SE La Amarga, Zapala*	Neuquén	Argentina	-39.1000	-69.5667	Genbank
MLPS 2353	*gununakuna*	*chiliensis*	2 km SE La Amarga, Zapala*	Neuquén	Argentina	-39.1000	-69.5667	Genbank
LJAMM 13358	*gununakuna*	*chiliensis*	Ruta Provincial 34, camino a Ramón Castro, 1 km N empalme Ruta Nacional 22, Zapala**	Neuquén	Argentina	-38.8930	-69.7863	From this study
LJAMM 13359	*gununakuna*	*chiliensis*	Ruta Provincial 34, camino a Ramón Castro, 1 km N empalme Ruta Nacional 22, Zapala**	Neuquén	Argentina	-38.8930	-69.7863	From this study
LJAMM 8569	*heliodermis*	*chiliensis*	Ruta Provincial 307, km 90, orillas del río Amaichá, Tafi del Valle*	Tucumán	Argentina	-26.7103	-65.7976	From this study
MUSM 31398	*incaicus*	*chiliensis*	Lucre, Quispicanchi	Cusco	Peru	-13.6333	-71.7333	Genbank
BYU 50124	*incaicus*	*chiliensis*	Urco, Calca*	Cusco	Peru	-13.3167	-71.9833	Genbank
JTP 159	*janequeoae*	*chiliensis*	Laguna Verde, Tolhuaca*	Araucanía	Chile	-38.2000	-71.7333	From this study
SSUC 650	*janequeoae*	*chiliensis*	Laguna Verde, Tolhuaca*	Araucanía	Chile	-38.2000	-71.7333	From this study
DE 418	*janequeoae*	*chiliensis*	Laguna Verde, Tolhuaca*	Araucanía	Chile	-38.2000	-71.7333	From this study
SSUC 651	*janequeoae*	*chiliensis*	Laguna Verde, Tolhuaca*	Araucanía	Chile	-38.2000	-71.7333	Genbank

LJAMM 5562	*kriegi*	*chiliensis*	El Cuy, 20 km S Mencue**	Río Negro	Argentina	-40.5679	-69.7498	Genbank
LJAMM 14301	*kriegi*	*chiliensis*	Pilcaniyeu, Dina Huapi**	Río Negro	Argentina	-41.1195	-70.8974	Genbank
JTP 155	*leftrarui*	*chiliensis*	Laguna Verde, Tolhuaca*	Araucanía	Chile	-38.2000	-71.7333	From this study
JTP 174	*leftrarui*	*chiliensis*	Laguna Verde, Tolhuaca*	Araucanía	Chile	-38.2000	-71.7333	From this study
SSUC 648	*leftrarui*	*chiliensis*	Laguna Verde, Tolhuaca*	Araucanía	Chile	-38.2000	-71.7333	Genbank
DD 065	*leopardinus*	*chiliensis*	Casa Piedra, camino a Valle Nevado**	Metropolitana	Chile	-33.3500	-70.2833	From this study
DD 071	*leopardinus*	*chiliensis*	Casa Piedra, camino a Valle Nevado**	Metropolitana	Chile	-33.3500	-70.2833	From this study
JTP333	*leopardinus*	*chiliensis*	Yerba Loca	Metropolitana	Chile	-33.2500	-70.2833	From this study
MNHN 4890	*leopardinus*	*chiliensis*	El Colorado, Lo Barnechea**	Metropolitana	Chile	-33.3417	-70.2894	From this study
MNHN 4891	*leopardinus*	*chiliensis*	El Colorado, Lo Barnechea**	Metropolitana	Chile	-33.3417	-70.2894	From this study
SSUC 0747	*leopardinus*	*chiliensis*	Cerro Conchali	Metropolitana	Chile	-33.2679	-70.4796	From this study
SSUC 0748	*leopardinus*	*chiliensis*	Cerro Conchali	Metropolitana	Chile	-33.2692	-70.4784	From this study
SSUC 0366	*leopardinus*	*chiliensis*	Farellones**	Metropolitana	Chile	-33.3419	-70.2922	From this study
SSUC 0367	*leopardinus*	*chiliensis*	Farellones**	Metropolitana	Chile	-33.3419	-70.2922	From this study
DD 034	*leopardinus*	*chiliensis*	Cerro Provincia	Metropolitana	Chile	-33.4258	-70.4394	From this study
DE 005	*leopardinus*	*chiliensis*	Lagunillas	Metropolitana	Chile	-33.6008	-70.2869	From this study
SSUC 0490	*leopardinus*	*chiliensis*	Cerro San Ramón	Metropolitana	Chile	-33.4833	-70.3833	From this study
SSUCRe 653	*leopardinus*	*chiliensis*	Lagunillas	Metropolitana	Chile	-33.6008	-70.2869	From this study
SSUCRe 655	*leopardinus*	*chiliensis*	Lagunillas	Metropolitana	Chile	-33.6008	-70.2869	From this study
DD 005	*lonquimayensis*	*chiliensis*	Laguna Blanca	Araucanía	Chile	-38.3481	-71.6358	From this study
DD 011	*lonquimayensis*	*chiliensis*	Volcán Lonquimay*	Araucanía	Chile	-38.3936	-71.6186	From this study
DD 035	*lonquimayensis*	*chiliensis*	Conguillio	Araucanía	Chile	-38.7175	-71.6278	From this study
DD 043	*lonquimayensis*	*chiliensis*	Laguna del Arcoiris, Conguillio	Araucanía	Chile	-38.6719	-71.6219	From this study
DE 08	*lonquimayensis*	*chiliensis*	Cumbre Batea-Mahuida	Araucanía	Chile	-38.7977	-71.1816	From this study
DE 10	*lonquimayensis*	*chiliensis*	Paso Pino Hachado	Araucanía	Chile	-38.6372	-70.9687	From this study
SSUC 0546	*lonquimayensis*	*chiliensis*	8 km. E de la Cumbre del Volcán Llaima	Araucanía	Chile	-38.6333	-71.7000	From this study
SSUC 0618	*lonquimayensis*	*chiliensis*	8 km. E de la Cumbre del Volcán Llaima	Araucanía	Chile	-38.6333	-71.7000	From this study
SSUC 669	*lonquimayensis*	*chiliensis*	Paso Pino Hachado	Araucanía	Chile	-38.6623	-70.8889	From this study
SSUC 672	*lonquimayensis*	*chiliensis*	Paso Pino Hachado	Araucanía	Chile	-38.6623	-70.8889	From this study
SSUC 658	*lonquimayensis*	*chiliensis*	Laguna Verde, paso Piedras Blancas	Araucanía	Chile	-38.5282	-70.9947	From this study
SSUC 665	*lonquimayensis*	*chiliensis*	Cumbre Batea-Mahuida	Araucanía	Chile	-38.7977	-71.1816	From this study
SSUC 666	*lonquimayensis*	*chiliensis*	Cumbre Batea-Mahuida	Araucanía	Chile	-38.7977	-71.1816	From this study
SSUC 670	*lonquimayensis*	*chiliensis*	Paso Pino Hachado	Araucanía	Chile	-38.6623	-70.8889	From this study
DE 450	*lonquimayensis*	*chiliensis*	Lanin	Araucanía	Chile	-39.6167	-71.4667	From this study
DD 032	*lonquimayensis*	*chiliensis*	Conguillio	Araucanía	Chile	-38.7175	-71.6278	From this study
DD 042	*lonquimayensis*	*chiliensis*	Conguillio	Araucanía	Chile	-38.7175	-71.6278	From this study
LJAMM 8078	*lonquimayensis*	*chiliensis*	Provincial Road 46, 9.5 km SW entrance SW Parque Nacional Laguna Blanca, Catán Lil	Neuquén	Argentina	-39.1351	-70.4295	Genbank
LJAMM 12987	*lonquimayensis*	*chiliensis*	Los Pendientes, Cerro Chapelco, Lacar	Neuquén	Argentina	-40.1932	-71.3057	Genbank
LJAMM 1203	*meraxes*	*chiliensis*	6 Km S Laguna Coipo Lauquen	Mendoza	Argentina	-36.6325	-69.8375	GenBank
LJAMM 1391	*meraxes*	*chiliensis*	6 Km S Laguna Coipo Lauquen	Mendoza	Argentina	-36.6325	-69.8375	GenBank
SSUC 0223	*moradoensis*	*chiliensis*	Lo Valdés**	Metropolitana	Chile	-33.8500	-70.0500	From this study
DD 002	*moradoensis*	*chiliensis*	El Yeso	Metropolitana	Chile	-33.6167	-69.9167	From this study
DD 003	*moradoensis*	*chiliensis*	El Yeso	Metropolitana	Chile	-33.6167	-69.9167	From this study
SSUC 0229	*moradoensis*	*chiliensis*	Lo Valdés**	Metropolitana	Chile	-33.8500	-70.0500	From this study
SSUC 0234	*moradoensis*	*chiliensis*	Baños Colina	Metropolitana	Chile	-33.8356	-69.9882	From this study
SSUC 0236	*moradoensis*	*chiliensis*	Termas del Plomo	Metropolitana	Chile	-33.6175	-69.9093	From this study
DE 425	*neuquensis*	*chiliensis*	Copahue*	Biobío	Chile	-37.8333	-71.1667	From this study
DE 426	*neuquensis*	*chiliensis*	Copahue*	Biobío	Chile	-37.8333	-71.1667	From this study
FML 9465	*neuquensis*	*chiliensis*	Primeros Pinos	Neuquén	Argentina	-38.8500	-70.5500	Genbank
LJAMM 13916	*neuquensis*	*chiliensis*	Termas de Copahue, a 1 km de la salida, Ñorquin*	Neuquén	Argentina	-37.8198	-71.1011	From this study
LJAMM 13917	*neuquensis*	*chiliensis*	Termas de Copahue, a 1 km de la salida, Ñorquin*	Neuquén	Argentina	-37.8198	-71.1011	From this study
SSUC 742	*normae*	*chiliensis*	Laguna El Cristal*	O'Higgins	Chile	-34.5667	-70.5000	From this study

SSUC 741	*normae*	*chiliensis*	Laguna El Cristal*	O'Higgins	Chile	-34.5667	-70.5000	From this study
LJAMM 14780	*parvus*	*chiliensis*	Ruta Nacional 76, 49.8 km W Alto Jagüe, 6 km W entrada Quebrada Santo Domingo*	La Rioja	Argentina	-28.5105	-68.7811	From this study
LJAMM 14782	*parvus*	*chiliensis*	Ruta Nacional 76, 49.8 km W Alto Jagüe, 6 km W entrada Quebrada Santo Domingo*	La Rioja	Argentina	-28.5105	-68.7811	From this study
LJAMM 2671	*parvus*	*chiliensis*	Vallecitos, Luja de Cuyo	Mendoza	Argentina	-32.9983	-69.3372	Genbank
LJAMM 2761	*parvus*	*chiliensis*	Vallecitos, Luja de Cuyo	Mendoza	Argentina	-32.9983	-69.3372	Genbank
LJAMM 2704	*parvus*	*chiliensis*	Quebrada Honda, Iglesia	San Juan	Argentina	-29.3725	-69.4808	Genbank
DD 010	*paulinae*	*chiliensis*	Chiuchiu	Antofagasta	Chile	-22.3378	-68.6461	From this study
DD 033	*paulinae*	*chiliensis*	Chiuchiu	Antofagasta	Chile	-22.3378	-68.6461	From this study
DD 041	*paulinae*	*chiliensis*	Calama*	Antofagasta	Chile	-22.4800	-68.9283	From this study
SSUC 0361	*paulinae*	*chiliensis*	Rio Calama*	Antofagasta	Chile	-22.4500	-68.8833	From this study
LJAMM 4775	*petrophilus*	*chiliensis*	Meseta del Somuncurá*	Río Negro	Argentina	-40.9667	-66.6500	Genbank
LJAMM 4776	*petrophilus*	*chiliensis*	Meseta del Somuncurá*	Río Negro	Argentina	-40.9667	-66.6500	Genbank
LJAMM 15611	*petrophilus*	*chiliensis*	Ruta Provincial 8, 4.7 km S Prahuaniyeu, 9 de Julio	Río Negro	Argentina	-41.3529	-67.9312	From this study
LJAMM 15812	*petrophilus*	*chiliensis*	Barda N laguna Paraguay, a 937 m de Ruta Provincial 60, Meseta de Somuncura, 60 km SW puesto Guardaparque (Comisaria Chipauquil), 9 de Julio	Río Negro	Argentina	-41.3605	-66.9404	From this study
SSUC 0130	*pictus*	*chiliensis*	Cerca de Lonquimay	Araucanía	Chile	-38.4167	-71.4333	From this study
DD 001	*pictus*	*chiliensis*	Conguillio	Araucanía	Chile	-38.6475	-71.6433	From this study
DE 436	*pictus*	*chiliensis*	Volcan Villarrica	Araucanía	Chile	-39.3667	-71.9333	From this study
JTP 117	*pictus*	*chiliensis*	Conguillio	Araucanía	Chile	-38.6831	-71.6172	From this study
DD 016	*pictus*	*chiliensis*	Lechagua	Los Lagos	Chile	-41.8861	-73.8508	From this study
SSUC 0609	*pictus*	*chiliensis*	Ancud, Chiloé	Los Lagos	Chile	-41.8833	-73.6333	From this study
MNHN 4784	*pikunche*	*chiliensis*	Río Teno, Romeral, Curicó	Maule	Chile	-35.1375	-70.4761	From this study
MNHN 4785	*pikunche*	*chiliensis*	Río Teno, Romeral, Curicó	Maule	Chile	-35.1375	-70.4761	From this study
LJAMM 14121	*pikunche*	*chiliensis*	Ruta J-585, Camino a El Planchon, 6.3 km empalme ruta Pichuante-Paso Vergara	Maule	Chile	-35.1356	-70.5162	From this study
DD 013	*pikunche*	*chiliensis*	Alto Huemul	O'Higgins	Chile	-34.8753	-70.6586	From this study
DD 014	*pikunche*	*chiliensis*	Alto Huemul	O'Higgins	Chile	-34.8753	-70.6586	From this study
JTP 278	*pikunche*	*chiliensis*	Alto Huemul	O'Higgins	Chile	-34.8667	-70.6500	From this study
DD 037	*puna*	*chiliensis*	Llullaillaco	Antofagasta	Chile	-24.6267	-68.6442	From this study
DE 442	*puna*	*chiliensis*	El Tatio	Antofagasta	Chile	-22.3333	-68.0000	From this study
DD 036	*puna*	*chiliensis*	Linzor	Antofagasta	Chile	-22.2386	-68.0361	From this study
MNHN 4420	*puna*	*chiliensis*	Altos de Puritama, San Pedro de Atacama, El Loa	Antofagasta	Chile	-22.6975	-68.0414	From this study
MNHN 4421	*puna*	*chiliensis*	Altos de Puritama, San Pedro de Atacama, El Loa	Antofagasta	Chile	-22.6975	-68.0414	From this study
LJAMM 2626	*punmahuida*	*chiliensis*	Parque Provincial Laguna Tromen, Volcán Tromen*	Neuquén	Argentina	-37.1044	-70.1408	From this study
LJAMM 2649	*punmahuida*	*chiliensis*	Parque Provincial Laguna Tromen, Volcán Tromen*	Neuquén	Argentina	-37.1044	-70.1408	From this study
BYU 47180	*ramirezae*	*chiliensis*	Ruta Provincial 307, 21.7 km E Amaichá del Valle*	Tucumán	Argentina	-26.6667	-65.8000	Genbank
LJAMM 4416	*ramirezae*	*chiliensis*	Ruta Provincial 307, 21.7 km E Amaichá del Valle *	Tucumán	Argentina	-26.6667	-65.8000	Genbank
LJAMM 12696	*ramirezae*	*chiliensis*	Los Cardones, 21.5 km SE Amaicha del Valle, via Ruta Provincial 307*	Tucumán	Argentina	-26.6754	-65.8182	From this study
LJAMM 12697	*ramirezae*	*chiliensis*	Los Cardones, 21.5 km SE Amaicha del Valle, via Ruta Provincial 307*	Tucumán	Argentina	-26.6754	-65.8182	From this study
SSUC 0493	*riodamas*	*chiliensis*	Laguna Teno, interior de Curicó	Maule	Chile	-35.1500	-70.5333	From this study
SSUC 0494	*riodamas*	*chiliensis*	Laguna Teno, interior de Curicó	Maule	Chile	-35.1500	-70.5333	From this study
DD 021	*riodamas*	*chiliensis*	Río Las Damas*	O'Higgins	Chile	-34.9333	-70.3833	From this study
MNHN 4682	*riodamas*	*chiliensis*	Río Las Damas*	O'Higgins	Chile	-34.9500	-70.4000	From this study
MNHN 4684	*riodamas*	*chiliensis*	Río Las Damas*	O'Higgins	Chile	-34.9500	-70.4000	From this study
LJAMM 1961	*robertmertensi*	*chiliensis*	R. Nac. 60 & Rio La Puerta. Km 1298 , Tinogasta**	Catamarca	Argentina	-28.2456	-67.4531	Genbank
LJAMM 16593	*robertmertensi*	*chiliensis*	Ruta Provincial 48, 8 km W Agua de las Palomas, cuesta de las Chilcas**	Catamarca	Argentina	-27.6342	-66.1711	From this study
LJAMM 4754	*robertmertensi*	*chiliensis*	Ruta Nacional 60, 7 km N Tinogasta**	Catamarca	Argentina	-27.9583	-67.6366	From this study
LJAMM 8455	*saxatilis*	*chiliensis*	RP 30, 8 km W Achiras*	Córdoba	Argentina	-33.1667	-65.0333	Genbank
LJAMM 8456	*saxatilis*	*chiliensis*	RP 30, 8 km W Achiras*	Córdoba	Argentina	-33.1667	-65.0333	Genbank
LJAMM 16533	*saxatilis*	*chiliensis*	Ruta Provincial 30, 7 km W Achiras*	Córdoba	Argentina	-33.1610	-65.0535	From this study
LJAMM 16534	*saxatilis*	*chiliensis*	Ruta Provincial 30, 7 km W Achiras*	Córdoba	Argentina	-33.1610	-65.0535	From this study
Unknown	*schroederi*	*chiliensis*	Cobquecura	Biobío	Chile	-36.1333	-72.7667	Genbank

Unknown	*schroederi*	*chiliensis*	Cobquecura	Biobío	Chile	-36.1333	-72.7667	Genbank
CG 003	*schroederi*	*chiliensis*	Rio Puelche	Maule	Chile	-35.8333	-70.5667	From this study
CG 007	*schroederi*	*chiliensis*	Parque Privado Los Hualos de Loanco	Maule	Chile	-35.5833	-72.4667	From this study
JTP 052	*schroederi*	*chiliensis*	Los Queñes*	Maule	Chile	-34.9833	-70.8000	From this study
SSUC 0371	*schroederi*	*chiliensis*	Reserva Nacional Los Ruiles	Maule	Chile	-35.8167	-72.4000	From this study
SSUC 0539	*schroederi*	*chiliensis*	Los Queñes*	Maule	Chile	-34.9833	-70.8000	From this study
DD 003	*schroederi*	*chiliensis*	Yerba Loca	Metropolitana	Chile	-33.2558	-70.2842	From this study
DD 017	*schroederi*	*chiliensis*	Cantillana	Metropolitana	Chile	-34.0050	-70.8806	From this study
DD 020	*schroederi*	*chiliensis*	Cantillana	Metropolitana	Chile	-34.0050	-70.8806	From this study
SSUC754	*schroederi*	*chiliensis*	Bocatoma Rio Olivares	Metropolitana	Chile	-33.4000	-70.1333	From this study
SSUC 0089	*schroederi*	*chiliensis*	Altos de Cantillana	Metropolitana	Chile	-33.9500	-70.9667	From this study
SSUC 0370	*schroederi*	*chiliensis*	Yerba loca	Metropolitana	Chile	-33.2500	-70.2833	From this study
JTP 235	*schroederi*	*chiliensis*	Los Lirios	O'Higgins	Chile	-34.2167	-70.7833	From this study
DE 439	*schroederi*	*chiliensis*	Alto Huemul	O'Higgins	Chile	-34.8667	-70.6500	From this study
SSUC 0368	*schroederi*	*chiliensis*	Termas del Flaco	O'Higgins	Chile	-34.9500	-70.4167	From this study
SSUC 0369	*schroederi*	*chiliensis*	Termas del Flaco	O'Higgins	Chile	-34.9500	-70.4167	From this study
SSUC 0614	*scorialis*	*chiliensis*	7 km. al N.W. del Volcán Antuco, Cumbre, Laguna del Laja*	Biobío	Chile	-37.3500	-71.3833	From this study
SSUC 0615	*scorialis*	*chiliensis*	7 km. al N.W. del Volcán Antuco, Cumbre, Laguna del Laja*	Biobío	Chile	-37.3500	-71.3833	From this study
SSUC 0680	*scorialis*	*chiliensis*	7 km. al N.W. del Volcán Antuco, Cumbre, Laguna del Laja*	Biobío	Chile	-37.3500	-71.3833	From this study
DD 022	*scorialis*	*chiliensis*	Laja*	Biobío	Chile	-37.3778	-71.3522	From this study
SSUC 0131	*septentrionalis*	*chiliensis*	Parque Nacional Nahuelbuta	Araucanía	Chile	-37.8167	-72.9500	From this study
SSUC 0132	*septentrionalis*	*chiliensis*	Parque Nacional Nahuelbuta	Araucanía	Chile	-37.8167	-72.9500	From this study
DD 047	*septentrionalis*	*chiliensis*	Chillan	Biobío	Chile	-36.9047	-71.4019	From this study
SSUC 0538	*septentrionalis*	*chiliensis*	Lircay*	Maule	Chile	-35.1167	-71.0500	From this study
JTP 026	*septentrionalis*	*chiliensis*	Lircay*	Maule	Chile	-35.1167	-71.0500	From this study
JTP 277	*septentrionalis*	*chiliensis*	Altos de Huemul	O'Higgins	Chile	-34.8333	-70.6667	From this study
LJAMM 5537	*shitan*	*chiliensis*	Provincial Road 67. 19,2 Km NE Mencue	Río Negro	Argentina	-40.3253	-69.4383	Genbank
LJAMM 13498	*shitan*	*chiliensis*	4 km N empalme Ruta Provincial 67, 6 y 74, 1 km N Chasicó, 36 km SW Aguada Guzman por Ruta Provincial 74**	Río Negro	Argentina	-40.2871	-68.9649	Genbank
LJAMM 6853	*shitan*	*chiliensis*	Ruta provincial 8, 81.4 km N Los Menucos, 18 km S San Antonio del Cuy, estancia Las Piedras Blancas*	Río Negro	Argentina	-40.2862	-68.4596	From this study
LJAMM 6854	*shitan*	*chiliensis*	Ruta provincial 8, 81.4 km N Los Menucos, 18 km S San Antonio del Cuy, estancia Las Piedras Blancas*	Río Negro	Argentina	-40.2862	-68.4596	From this study
LJAMM 7025	*shitan*	*chiliensis*	Ruta Provincial 74, 20 km SW Aguada Guzman**	Río Negro	Argentina	-40.1328	-68.9396	From this study
LJAMM 7026	*shitan*	*chiliensis*	Ruta Provincial 74, 20 km SW Aguada Guzman**	Río Negro	Argentina	-40.1328	-68.9396	From this study
LJAMM 13507	*shitan*	*chiliensis*	4 km N empalme Ruta Provincial 67, 6 y 74, 1 km N Chasicó, 36 km SW Aguada Guzman por Ruta Provincial 74**	Río Negro	Argentina	-40.2871	-68.9649	From this study
LJAMM 13508	*shitan*	*chiliensis*	4 km N empalme Ruta Provincial 67, 6 y 74, 1 km N Chasicó, 36 km SW Aguada Guzman por Ruta Provincial 74**	Río Negro	Argentina	-40.2871	-68.9649	From this study
LJAMM 14199	*smaug*	*chiliensis*	Baños del Azufre**	Mendoza	Argentina	-35.2939	-70.5169	From this study
LJAMM 14200	*smaug*	*chiliensis*	Baños del Azufre**	Mendoza	Argentina	-35.2939	-70.5169	From this study
LJAMM 7999	*sp. 2*	*chiliensis*	camino a Castillos de Pincheira, 3 km W Castillos, confluencia arroyo de las Minas y arroyo Torrecillas	Mendoza	Argentina	-35.5180	-69.8258	From this study
LJAMM 8000	*sp. 2*	*chiliensis*	camino a Castillos de Pincheira, 3 km W Castillos, confluencia arroyo de las Minas y arroyo Torrecillas	Mendoza	Argentina	-35.5180	-69.8258	From this study
LJAMM 13887	*sp. 3*	*chiliensis*	Pino Hachado	Neuquén	Argentina	-38.6597	-70.8300	GenBank
LJAMM 13896	*sp. 3*	*chiliensis*	Pino Hachado	Neuquén	Argentina	-38.6597	-70.8300	From this study
LJAMM 13897	*sp. 3*	*chiliensis*	Pino Hachado	Neuquén	Argentina	-38.6597	-70.8300	From this study
LJAMM 13902	*sp. 6*	*chiliensis*	Termas de Copahue	Neuquén	Argentina	-37.8197	-71.1011	From this study
LJAMM 13903	*sp. 6*	*chiliensis*	Termas de Copahue	Neuquén	Argentina	-37.8197	-71.1011	From this study
LJAMM 5348	*sp. 6*	*chiliensis*	Ruta Provincial 21, 9.5 Km, en camino a Grupo Venado de las Damas (R.P. 28)	Neuquén	Argentina	-37.7396	-70.7564	From this study
LJAMM 5346	*sp. 6*	*chiliensis*	Ruta Provincial 21, 9.5 Km, en camino a Grupo Venado de las Damas (R.P. 28)	Neuquén	Argentina	-37.7396	-70.7564	From this study
LJAMM 14198	*sp. 6*	*chiliensis*	Paso Pichachen, Ruta Antuco-Los Barros-Moncol, 20.2 km E de Los Barros	Biobío	Chile	-37.4958	-71.1462	From this study

LJAMM 5227	*sp. 7*	*chiliensis*	Ruta Provincial 37, cruce con Arroyo Butaco	Neuquén	Argentina	-36.9886	-70.0005	From this study
LJAMM 5228	*sp. 7*	*chiliensis*	Ruta Provincial 37, cruce con Arroyo Butaco	Neuquén	Argentina	-36.9886	-70.0005	From this study
LJAMM 12175	*sp. B*	*chiliensis*	Ruta Provincial 53 (Circuito Cochico) 60.6 km NW empalme Ruta Provincial 37, entre Huinganco y Butaco	Neuquén	Argentina	-36.5214	-70.1519	From this study
LJAMM 12176	*sp. B*	*chiliensis*	Ruta Provincial 53 (Circuito Cochico) 60.6 km NW empalme Ruta Provincial 37, entre Huinganco y Butaco	Neuquén	Argentina	-36.5214	-70.1519	From this study
LJAMM 12149	*sp. C*	*chiliensis*	Ruta Provincial 37, 29.2 km N empalme Ruta Nacional 40, entrada Area Natural Protegida Tromen, Laguna Los Barros	Neuquén	Argentina	-37.1299	-70.1450	From this study
LJAMM 12150	*sp. C*	*chiliensis*	Ruta Provincial 37, 29.2 km N empalme Ruta Nacional 40, entrada Area Natural Protegida Tromen, Laguna Los Barros	Neuquén	Argentina	-37.1299	-70.1450	From this study
LJAMM 7898	*sp. D*	*chiliensis*	Ruta Nacional 145, 17.3 km E paso Pehuenche, 23 km W Las Loicas	Mendoza	Argentina	-35.9584	-70.2336	From this study
LJAMM 7899	*sp. D*	*chiliensis*	Ruta Nacional 145, 17.3 km E paso Pehuenche, 23 km W Las Loicas	Mendoza	Argentina	-35.9584	-70.2336	From this study
LJAMM 1972	*talampaya*	*chiliensis*	Parque Nacional Talampaya, Río Shimpa*	La Rioja	Argentina	-29.7461	-67.7556	Genbank
LJAMM 1980	*talampaya*	*chiliensis*	Parque Nacional Talampaya, Río Shimpa*	La Rioja	Argentina	-29.7461	-67.7556	From this study
LJAMM 2737	*talampaya*	*chiliensis*	Parque Nacional Talampaya, Río Shimpa*	La Rioja	Argentina	-29.7461	-67.7556	From this study
LJAMM 14130	*thermarum*	*chiliensis*	Paso Vergara, 3 km E limite Argentina-Chile, 5 km antes del puesto fronterizo*	Mendoza	Argentina	-35.2269	-70.5146	From this study
LJAMM 14131	*thermarum*	*chiliensis*	Paso Vergara, 3 km E limite Argentina-Chile, 5 km antes del puesto fronterizo*	Mendoza	Argentina	-35.2269	-70.5146	From this study
LJAMM 13918	*tregenzai*	*chiliensis*	Termas de Copahue, a 1 km de la salida*	Neuquén	Argentina	-37.8198	-71.1011	From this study
LJAMM 13919	*tregenzai*	*chiliensis*	Termas de Copahue, a 1 km de la salida*	Neuquén	Argentina	-37.8198	-71.1011	From this study
LJAMM 4219	*tulkas*	*chiliensis*	Chascuil, Tinogasta**	Catamarca	Argentina	-27.8000	-68.0167	GenBank
LJAMM 4227	*tulkas*	*chiliensis*	Chascuil, Tinogasta**	Catamarca	Argentina	-27.8080	-68.0274	GenBank
LJAMM 15702	*tulkas*	*chiliensis*	Ruta Nacional 60, 58.7 km W Fiambalá, 7 km E Chaschuil**	Catamarca	Argentina	-27.8080	-68.0274	From this study
LJAMM 15703	*tulkas*	*chiliensis*	Ruta Nacional 60, 58.7 km W Fiambalá, 7 km E Chaschuil**	Catamarca	Argentina	-27.8080	-68.0274	From this study
SSUC735	*ubaghsi*	*chiliensis*	Rio Tinto	O'Higgins	Chile	-33.9667	-70.4167	From this study
DD 045	*ubaghsi*	*chiliensis*	Chapa Verde*	O'Higgins	Chile	-34.0506	-70.4314	From this study
SSUC 0491	*ubaghsi*	*chiliensis*	Tranque Barahona, El Teniente*	O'Higgins	Chile	-34.0667	-70.5000	From this study
SSUC 0492	*ubaghsi*	*chiliensis*	Tranque Barahona, El Teniente*	O'Higgins	Chile	-34.0667	-70.5000	From this study
LJAMM 5031	*umbrifer*	*chiliensis*	1,5 km N entrada S Quebrada de Randolfo*	Catamarca	Argentina	-26.8633	-66.7386	GenBank
LJAMM 5032	*umbrifer*	*chiliensis*	1,5 km N entrada S Quebrada de Randolfo*	Catamarca	Argentina	-26.8633	-66.7386	From this study
LJAMM 5033	*umbrifer*	*chiliensis*	1,5 km N entrada S Quebrada de Randolfo*	Catamarca	Argentina	-26.8633	-66.7386	From this study
CG 004	*valdesianus*	*chiliensis*	Valle La Engorda**	Metropolitana	Chile	-33.7833	-69.9833	From this study
JTP 101	*valdesianus*	*chiliensis*	Lo Valdés*	Metropolitana	Chile	-33.8500	-70.0500	From this study
SSUC744	*valdesianus*	*chiliensis*	El Yeso	Metropolitana	Chile	-33.6333	-70.0167	From this study
LJAMM 5551	*valdesianus*	*chiliensis*	El Yeso	Metropolitana	Chile	-33.6333	-70.0167	From this study
SSUC745	*valdesianus*	*chiliensis*	Lo Valdés*	Metropolitana	Chile	-33.8531	-70.0536	From this study
SSUC 0363	*vhagar*	*chiliensis*	R. Pcial. 23. 4.8 Km SE Comallo	Rio Negro	Argentina	-41.04	-70.21555	Genbank
DE 423	*villaricensis*	*chiliensis*	Volcan Villarrica*	Araucanía	Chile	-39.3833	-71.9500	From this study
DE 433	*villaricensis*	*chiliensis*	Volcan Villarrica*	Araucanía	Chile	-39.3833	-71.9500	From this study
DD 028	*zabalai*	*chiliensis*	El Laja*	Biobío	Chile	-37.3778	-71.3522	From this study
Lj 01	*zabalai*	*chiliensis*	El Laja*	Biobío	Chile	-37.3778	-71.3522	From this study
Lj02	*zabalai*	*chiliensis*	El Laja*	Biobío	Chile	-37.3778	-71.3522	From this study
LJAMM 14152	*zabalai*	*chiliensis*	Paso Pichachen, Ruta Antuco-Los Barros-Moncol, 20.2 km E de Los Barros	Biobío	Chile	-37.4958	-71.1462	From this study
SSUC 0468	*atacamensis*	*nigromaculatus*	Lomas del Buitre, Freirina, Atacama	Atacama	Chile	-28.9000	-71.3000	From this study
SSUC 0688	*atacamensis*	*nigromaculatus*	Vallenar	Atacama	Chile	-28.5667	-70.7500	From this study
SSUC 0456	*atacamensis*	*nigromaculatus*	Playa Humedal (entre Tongoy y Puerto Aldea), Pachingo, Coquimbo	Coquimbo	Chile	-30.3019	-71.5719	From this study
SSUC 0470	*atacamensis*	*nigromaculatus*	El Trapiche	Coquimbo	Chile	-29.3833	-70.9833	From this study
DD 038	*cf. silvai*	*nigromaculatus*	Sarco**	Atacama	Chile	-28.8667	-71.3833	From this study
SSUC 0350	*confusus*	*nigromaculatus*	Cerro Los Robles, Lolol*	O'Higgins	Chile	-34.7833	-71.7667	From this study
DD 008	*constanzae*	*nigromaculatus*	Zorras	Antofagasta	Chile	-24.4833	-68.7167	From this study
DD 011	*constanzae*	*nigromaculatus*	Cerca de Toconao**	Antofagasta	Chile	-23.4167	-67.9833	From this study
DD 023	*constanzae*	*nigromaculatus*	Talabre**	Antofagasta	Chile	-23.3000	-67.9000	From this study
DD 055	*constanzae*	*nigromaculatus*	Llano de la Paciencia	Antofagasta	Chile	-22.8833	-68.3167	From this study
SSUC 0345	*constanzae*	*nigromaculatus*	Barros Aranas	Antofagasta	Chile	-22.6754	-68.4667	From this study

DD 078	*curicensis*	*nigromaculatus*	Cantillana	Metropolitana	Chile	-33.9500	-70.9667	From this study
DE 445	*curicensis*	*nigromaculatus*	Alto Huemul	O'Higgins	Chile	-34.8667	-70.6500	From this study
DD 016	*curicensis*	*nigromaculatus*	Termas del Flaco	O'Higgins	Chile	-34.9500	-70.4167	From this study
SSUC 0247	*curicensis*	*nigromaculatus*	Termas del Flaco	O'Higgins	Chile	-34.6286	-70.4222	From this study
SSUC 0579	*fuscus*	*nigromaculatus*	Huasco	Atacama	Chile	-28.4667	-71.2167	From this study
DD 045	*fuscus*	*nigromaculatus*	Chicauma	Metropolitana	Chile	-33.2000	-70.9500	From this study
SSUC 0256	*fuscus*	*nigromaculatus*	Camino a Farellones, Curva 20	Metropolitana	Chile	-33.3501	-70.3259	From this study
SSUC 0259	*fuscus*	*nigromaculatus*	Altos de Jahuel**	Valparaíso	Chile	-32.6896	-70.6077	From this study
DD 025	*fuscus*	*nigromaculatus*	Los Molles	Valparaíso	Chile	-32.2167	-71.5167	From this study
DD 010	*hellmichi*	*nigromaculatus*	Cerro Moreno*	Antofagasta	Chile	-23.5000	-70.5667	From this study
DD 054	*hellmichi*	*nigromaculatus*	Reserva Nacional La Chimba**	Antofagasta	Chile	-23.5667	-70.3500	From this study
DD 006	*isabelae*	*nigromaculatus*	Camino a Pedernales*	Atacama	Chile	-26.3667	-69.2667	From this study
SSUC 0157	*isabelae*	*nigromaculatus*	El Cerrito, Salar de Pedernales*	Atacama	Chile	-26.3681	-69.2511	From this study
SSUC 0158	*isabelae*	*nigromaculatus*	El Cerrito, Salar de Pedernales*	Atacama	Chile	-26.3681	-69.2511	From this study
SSUC 0290	*kuhlmanni*	*nigromaculatus*	La Ligua	Valparaíso	Chile	-32.4167	-71.4167	From this study
SSUC 0285	*kuhlmanni*	*nigromaculatus*	Caleta de La Ligua	Valparaíso	Chile	-32.4167	-71.4167	From this study
DD 062	*lemniscatus*	*nigromaculatus*	Salto Truful	Araucanía	Chile	-38.8167	-71.6500	From this study
DE 413	*lemniscatus*	*nigromaculatus*	Ralco	Biobío	Chile	-37.9000	-71.6167	From this study
Uknown	*lemniscatus*	*nigromaculatus*	Hualane-Vichuquen	Maule	Chile	-34.9333	-71.9167	Genbank
Uknown	*lemniscatus*	*nigromaculatus*	Los Queñes	Maule	Chile	-34.9833	-70.8167	Genbank
Unknown	*lemniscatus*	*nigromaculatus*	Cementerio Vilches	Maule	Chile	-35.5500	-71.2000	Genbank
SSUC 0281	*lemniscatus*	*nigromaculatus*	Camino a Farellones,curva 20	Metropolitana	Chile	-33.3501	-70.3259	From this study
LJAMM 14363	*lemniscatus*	*nigromaculatus*	Ruca Hue, San Martin de los Andes, Lacar	Neuquén	Argentina	-40.1667	-71.3500	From this study
DE 438	*lemniscatus*	*nigromaculatus*	Alto Huemul	O'Higgins	Chile	-34.8667	-70.6500	From this study
Uknown	*lemniscatus*	*nigromaculatus*	Coya	O'Higgins	Chile	-34.2000	-70.5333	Genbank
SSUC 0273	*lemniscatus*	*nigromaculatus*	Chinchimel, Playa Luna*	Valparaíso	Chile	-32.7016	-71.4598	From this study
SSUC 0026	*lemniscatus*	*nigromaculatus*	Palma de Ocoa*	Valparaíso	Chile	-32.9000	-71.0833	From this study
Uknown	*lemniscatus*	*nigromaculatus*	Cementerio Olmué	Valparaíso	Chile	-32.9833	-71.1833	Genbank
DE 448	*lorenzmuelleri*	*nigromaculatus*	Quebrada Larga	Coquimbo	Chile	-28.6500	-69.9500	From this study
DE 449	*lorenzmuelleri*	*nigromaculatus*	Quebrada Larga	Coquimbo	Chile	-28.6500	-69.9500	From this study
DD 041	*maldonadae*	*nigromaculatus*	Alcohuaz	Coquimbo	Chile	-30.3667	-70.4167	From this study
SSUC 0305	*maldonadae*	*nigromaculatus*	Quebrada Los Piuquenes, interior Alcohuaz, sur de Aconcagua	Coquimbo	Chile	-30.4167	-70.3833	From this study
DD 058	*melaniceps*	*nigromaculatus*	Isla Chungungo*	Coquimbo	Chile	-29.4000	-71.3500	From this study
DD 080	*monticola*	*nigromaculatus*	Chellepin	Coquimbo	Chile	-32.0333	-70.6000	From this study
CUCH 2384	*monticola*	*nigromaculatus*	Rio Lontué	Maule	Chile	-35.2136	-71.0823	Genbank
CUCH 2638	*monticola*	*nigromaculatus*	Los Queñes	Maule	Chile	-34.9833	-70.8000	Genbank
DD 012	*monticola*	*nigromaculatus*	Cantillana	Metropolitana	Chile	-33.9683	-70.9983	From this study
SSUC 0377	*monticola*	*nigromaculatus*	Camino a Farellones, curva 20	Metropolitana	Chile	-33.3501	-70.3259	From this study
SSUC 087	*monticola*	*nigromaculatus*	Altos de Cantillana	Metropolitana	Chile	-33.9667	-70.9833	Genbank
SSUC 0372	*monticola*	*nigromaculatus*	Camino a Farellones, curva 20	Metropolitana	Chile	-33.3501	-70.3259	Genbank
MZUC 28601	*monticola*	*nigromaculatus*	Baños Morales	Metropolitana	Chile	-33.8200	-70.0078	Genbank
MZUC 28604	*monticola*	*nigromaculatus*	Lampa	Metropolitana	Chile	-33.2829	-70.8794	Genbank
MZUC 28603	*monticola*	*nigromaculatus*	San Fernando	O'Higgins	Chile	-34.5859	-70.9908	Genbank
CUCH 1457	*monticola*	*nigromaculatus*	Quebrada de Alvarado	Valparaíso	Chile	-33.0316	-71.0850	Genbank
CUCH 2091	*monticola*	*nigromaculatus*	Rocin**	Valparaíso	Chile	-32.4255	-70.3603	Genbank
DD 040	*nigrocoeruleus*	*nigromaculatus*	Playa La Virgen	Atacama	Chile	-27.4333	-70.8333	From this study
DD 046	*nigrocoeruleus*	*nigromaculatus*	Bahia Inglesa	Atacama	Chile	-27.0500	-70.8333	From this study
SSUC 0553	*nigrocoeruleus*	*nigromaculatus*	7km. al N.E. de Barranquilla*	Atacama	Chile	-27.3167	-70.2667	From this study
DD 018	*nigromaculatus*	*nigromaculatus*	Flamenco	Atacama	Chile	-26.6000	-70.6833	From this study
SSUC 0311	*nigromaculatus*	*nigromaculatus*	Caldera**	Atacama	Chile	-27.6009	-70.8671	From this study
DD 043	*nigroviridis*	*nigromaculatus*	Cantillana	Metropolitana	Chile	-33.9500	-70.9667	From this study
SSUC 0195	*nigroviridis*	*nigromaculatus*	Casa de Piedra, camino Valle Nevado**	Metropolitana	Chile	-33.3500	-70.2833	From this study
DE 01	*nigroviridis*	*nigromaculatus*	Lagunillas	Metropolitana	Chile	-33.6008	-70.2869	From this study

SSUC751	*nigroviridis*	*nigromaculatus*	Cerro Conchali	Metropolitana	Chile	-33.2785	-70.4837	From this study
SSUC 0193	*nigroviridis*	*nigromaculatus*	Casa de Piedra, camino Valle Nevado**	Metropolitana	Chile	-33.3500	-70.2833	From this study
SSUC 107	*nigroviridis*	*nigromaculatus*	Chicauma	Metropolitana	Chile	-33.2833	-70.9667	Genbank
SSUC 115	*nigroviridis*	*nigromaculatus*	Chicauma	Metropolitana	Chile	-33.2833	-70.9667	Genbank
SSUC 070	*nigroviridis*	*nigromaculatus*	Altos de Cantillana	Metropolitana	Chile	-33.9667	-70.9833	Genbank
SSUC 0408	*nigroviridis*	*nigromaculatus*	Reserva Cerro El Roble, Lampa	Valparaíso	Chile	-32.9667	-71.0000	From this study
SSUC 0409	*nigroviridis*	*nigromaculatus*	Reserva Cerro El Roble, Lampa	Valparaíso	Chile	-32.9667	-71.0000	From this study
DD 007	*nigroviridis*	*nigromaculatus*	El Juncal	Valparaíso	Chile	-32.9000	-70.0833	From this study
DD 032	*nigroviridis*	*nigromaculatus*	Portillo	Valparaíso	Chile	-32.8500	-70.1333	From this study
Lmm 308	*nigroviridis*	*nigromaculatus*	El Roble	Valparaíso	Chile	-32.9667	-71.0000	Genbank
SSUC 0301	*nitidus*	*nigromaculatus*	Lo Valdés	Metropolitana	Chile	-33.8500	-70.0500	From this study
SSUC 0079	*nitidus*	*nigromaculatus*	Altos de Cantillana	Metropolitana	Chile	-33.9500	-70.9667	From this study
SSUC 0299	*nitidus*	*nigromaculatus*	Camino a Farellones, curva 20	Metropolitana	Chile	-33.3501	-70.3259	From this study
SSUC 0705	*nitidus*	*nigromaculatus*	Quebrada de la Plata, Rinconada de Maipu	Metropolitana	Chile	-33.4947	-70.8985	From this study
SSUC 0706	*nitidus*	*nigromaculatus*	Quebrada de la Plata, Rinconada de Maipu	Metropolitana	Chile	-33.4947	-70.8985	From this study
SSUC 0321	*platei*	*nigromaculatus*	Reserva Nacional Las Chinchillas	Coquimbo	Chile	-31.5333	-71.0833	From this study
SSUC 0420	*platei*	*nigromaculatus*	Coquimbo	Coquimbo	Chile	-29.9500	-71.3333	From this study
DD 036	*pseudolemniscatus*	*nigromaculatus*	Chillepin	Coquimbo	Chile	-32.0333	-70.6000	From this study
DD 037	*pseudolemniscatus*	*nigromaculatus*	Chillepin	Coquimbo	Chile	-32.0333	-70.6000	From this study
SSUC 0391	*pseudolemniscatus*	*nigromaculatus*	Salida de Oyagua	Coquimbo	Chile	-30.6667	-71.4500	From this study
SSUC 0393	*pseudolemniscatus*	*nigromaculatus*	Salida de Oyagua	Coquimbo	Chile	-30.6667	-71.4500	From this study
SSUC 0536	*pseudolemniscatus*	*nigromaculatus*	Cerro Provincia	Metropolitana	Chile	-33.3833	-70.4500	From this study
DD 035	*silvai*	*nigromaculatus*	El Apolillado*	Atacama	Chile	-29.1667	-71.4833	From this study
SSUC 0581	*silvai*	*nigromaculatus*	Caleta Chañaral*	Atacama	Chile	-29.0667	-71.4833	From this study
SSUC 0583	*silvai*	*nigromaculatus*	Camino c.480 a Huasco**	Atacama	Chile	-28.4667	-71.1667	From this study
SSUC 0584	*silvai*	*nigromaculatus*	Caleta Sarco**	Atacama	Chile	-28.8667	-71.3833	From this study
DD 051	*silvai*	*nigromaculatus*	Isla Damas**	Coquimbo	Chile	-29.2167	-71.5167	From this study
SSUC 0580	*silvai*	*nigromaculatus*	Punta de Choros*	Coquimbo	Chile	-29.2500	-71.4667	From this study
DE 014	*tenuis*	*nigromaculatus*	Los Paraguas, Conguillio	Araucanía	Chile	-38.6644	-70.8239	From this study
SSUC 0263	*tenuis*	*nigromaculatus*	Entre Puerto Saavedra y Tirua	Araucanía	Chile	-38.6316	-73.4628	From this study
SSUC 0268	*tenuis*	*nigromaculatus*	Entre Puerto Saavedra y Tirua	Araucanía	Chile	-38.6316	-73.4628	From this study
SSUC 0269	*tenuis*	*nigromaculatus*	Entre Puerto Saavedra y Tirua	Araucanía	Chile	-38.6316	-73.4628	From this study
DD 057	*tenuis*	*nigromaculatus*	Las Vizcachas**	Metropolitana	Chile	-33.5667	-70.5500	From this study
DD 033	*uniformis*	*nigromaculatus*	Laguna Chepical, Alicahue*	Valparaíso	Chile	-32.2500	-70.5000	From this study
DD 052	*uniformis*	*nigromaculatus*	Laguna Chepical, Alicahue*	Valparaíso	Chile	-32.2500	-70.5000	From this study
SSUC 0678	*uniformis*	*nigromaculatus*	Orilla W de Laguna Chepical*	Valparaíso	Chile	-32.2500	-70.5000	From this study
DD 044	*velosoi*	*nigromaculatus*	Morro Bahia Inglesa	Atacama	Chile	-27.1167	-70.9167	From this study
DD 012	*velosoi (josephorum)*	*nigromaculatus*	Diego de Almagro*	Atacama	Chile	-26.4000	-70.0500	From this study
SSUC 0322	*velosoi*	*nigromaculatus*	Alianza, 20 k al sur de Copiapo**	Atacama	Chile	-27.5667	-70.2500	From this study
SSUC 0325	*velosoi*	*nigromaculatus*	Alianza, 20 k al sur de Copiapo**	Atacama	Chile	-27.5667	-70.2500	From this study
DD 026	*zapallarensis (sieversi)*	*nigromaculatus*	Isla Locos*	Coquimbo	Chile	-32.1167	-71.5167	From this study
DD 027	*zapallarensis*	*nigromaculatus*	Mantagua**	Valparaíso	Chile	-32.8667	-71.5000	From this study
DD 026	*cf. tacnae*	*Outgrpoup*	Quebrada Allane	Arica y Parinacota	Chile	-18.0464	-69.6469	From this study
DD 014	*cf. tacnae*	*Outgrpoup*	Quebrada Blanca	Tarapacá	Chile	-21.0614	-68.8514	From this study
DD 027	*cf. tacnae*	*Outgrpoup*	Quebrada Blanca	Tarapacá	Chile	-21.0614	-68.8514	From this study
BYU 50232	*tacnae*	*Outgrpoup*	Torata, Mariscal Nieto**	Moquegua	Peru	-17.0667	-70.8333	Genbank
MUSM 31406	*tacnae*	*Outgrpoup*	Chujulay, Mariscal Nieto**	Moquegua	Peru	-17.0167	-70.6000	Genbank

Table S3. Described species of the *Liolaemus* subgenus organized by section, complex and group, according to the results of this study. * *incertae sedis*: of uncertain grouping due to strong mito-nuclear discordance. **not included in study but supported by morphological similarities.

Section	Complex	Group	Species
nigromaculatus		*1. tenuis*	*tenuis*
		2. lemniscatus	*abdalai**, lemniscatus*
		3. nitidus	*confusus, curicensis, monticola, nitidus*
		4. fuscus	*fuscus, nigroviridis, uniformis*
		5. zapallarensis	*atacamensis, melaniceps, nigromaculatus, silvai, zapallarensis*
		6. lorenzmuelleri	*constanzae, isabelae, juanortizi**, lorenzmuelleri, maldonadae*
		7. platei	*hellmichi, melanopleurus**, platei, pseudolemniscatus*, velosoi*
chiliensis	*gravenhorstii-bibronii*	*8. gravenhorstii*	*araucaniensis, bellii, chiliensis, cyanogaster, gravenhorstii, fitzgeraldi, moradoensis, pictus, schroederi, septentrionalis*
		9. alticolor	*alticolor, aparicioi**, bitaeniatus*, chaltin, chungara, incaicus, pagaburoi**, paulinae, puna, pyriphlogos**, yalguaraz**
		10. chillanensis	*chillanensis, aureum*
		11. neuquensis	*coeruleus, neuquensis*
		12. villaricensis	*leftrarui, villaricensis*
		13. bibronii	*absconditus**, balerion, bibronii, cyaneinotatus**, exploratorum**, gracilis, meraxes, ramirezae, robertmertensi, saxatilis, tandiliensis**, vhagar, yanalcu**
	elongatus-kriegi	*14. kriegi*	*buergeri, kriegi, zabalai*
		15. capillitas	*capillitas, dicktracyi, heliodermis, talampaya, tulkas, umbrifer*
		16. petrophilus	*petrophilus*
		17. austromendocinus	*austromendocinus, gununakuna, burmeisteri**
		18. elongatus	*antonietae, antumalguen, carlosgarini, choique, crandalli, curis, elongatus, frassinettii, janequeoae, leopardinus, lonquimayensis, normae, parvus*, pikunche, scorialis, shitan*, ubaghsi*
		19. cristiani	*cristiani, thermarum*
		20. punmahuida	*flavipiceus, punmahuida, tregenzai**

Table S4. Divergence times estimates and 95% high posterior density confidence intervals from the dating analyses using the nDNA and mtDNA data. Units are in million years.

	Mitochondrial		Nuclear	
	Node Age	95% HPD	Node Age	95% HPD
Crown *Liolaemus* genus	22.15	18.8-25.6	21.34	18.4-24.9
Crown *Liolaemus* subgenus + walkeri group	21.8	18.5-25.3	20.94	18-24.5
Crown *Liolaemus* subgenus	21.46	18.2-25	19.28	16.6-22.6
Crown *nigromaculatus* section	19.33	16.2-22.8	17.43	14.8-20.6
Crown *chiliensis* section	19.21	16.1-22.6	13.68	11.3-16.5