LANKESTERIANA 26(2): 83–92. 2026. doi: http://dx.doi.org/10.15517/j4h3bb59

A NEW SPECIES OF *TELIPOGON* (ORCHIDACEAE: ONCIDIINAE) FOR NORTHERN PERU

Carlos Martel[1,2,7], James Alexander Chamaya Gonzáles[3,4], Gustavo Ibérico Vela[3], José D. Edquén[5], William Tafur Rodríguez[4] & Gabriel A. Iturralde[6]

[1]Royal Botanic Gardens, Kew, TW9 3AB, Richmond, United Kingdom.
[2]Instituto de Ciencias Ómicas y Biotecnología Aplicada, Pontificia Universidad Católica del Perú, San Miguel 15088, Lima, Perú.
[3]Universidad Nacional de Cajamarca, Cajamarca, Perú.
[4]Universidad Nacional Autónoma de Chota, Chota, Perú.
[5]Escuela de Posgrado, Programa Doctoral en Ciencias para el Desarrollo Sustentable, Facultad de Ingeniería Zootecnista, Biotecnología, Agronegocios y Ciencia de Datos, Universidad Nacional Toribio Rodríguez de Mendoza de Amazonas, Chachapoyas, Perú.
[6]Grupo de Investigación en Biodiversidad, Medio Ambiente y Salud (BIOMAS), Carrera de Ingeniería en Agroindustria, Facultad de Ingenierías y Ciencias Aplicadas, Universidad de Las Américas, Quito, Ecuador.
[7]Author for correspondence: c.martel@kew.org

Abstract. *Telipogon* is a highly diverse genus in the Andes, yet it remains incompletely documented in northern Peru. *Telipogon vasqueznunezii* is morphologically similar to *T. hystrix* but differs in the oblong-ligulate lip, the two small lobes at the lip base, the absence of a protrusion on the lip, and the tuft of acicular setae on the columnar appendix. A detailed description, illustrations, a distribution map, and a conservation assessment are provided here.

Resumen. *Telipogon* es un género altamente diverso en los Andes; sin embargo, está incompletamente documentado en el norte del Perú. *Telipogon vasqueznunezii* es morfológicamente similar a *T. hystrix*, pero se diferencia por el labio oblongo-lingulado, los dos pequeños lóbulos en la base del labio, la ausencia de una protuberancia en el labio y el mechón de setas aciculares en el apéndice columnar. Aquí se proporcionan una descripción detallada, ilustraciones, un mapa de distribución y una evaluación de su estado de conservación.

Keywords / Palabras clave: Andes, bosque montano relicto, miniature *Telipogon*, montane forest relic, *Telipogon* miniatura, *Telipogon embreei, Telipogon hystrix*

Introduction. *Telipogon* Kunth is a diverse neotropical orchid genus of Oncidiinae comprising more than 250 species (Martel *et al.*, 2020b). The genus is distributed from southern Mexico in the North to Bolivia in the South (Martel & Nauray, 2013). In South America, *Telipogon* species occur in the cloud Andean forests between 1500 and 3600 m elevation (Collantes & Martel, 2015), although occasional records outside this range have been reported (Martel, 2016). However, due to their specific niche ecological requirements, most *Telipogon* species have narrow distribution, occurring in only a few localities or even a single valley. Thus, many *Telipogon* species are only known from one locality (e.g., *T. phuyupatamarcensis* W.Galiano, P.Nuñez & Tupayachi; Collantes & Martel, 2016).

Based on the size of the plants and the flower characteristics, *Telipogon* species can be morphologically classified into two informal groups: (a) *Telipogon* species with large and showy flowers, and (b) *Telipogon* species with small and inconspicuous flowers. The latter informal group is known as miniature *Telipogon*, the former genus *Stellilabium* Schltr. which was synon-

ORCID of the Author: CM, JACG, GIV, JDE, WTR, GAI
Received 6 March 2026; accepted for publication 14 May 2026. First published online: 29 May 2026.
Licensed under a Creative Commons Attribution-NonCommercial-No Derivs 3.0 Costa Rica License.

ymized within *Telipogon* (Williams *et al*., 2005). The miniature *Telipogon* are characterized by their small plants (around 10 cm or less), flowers of around 1 cm or less in diameter, which present a pale or dark coloration (cream, greenish, reddish or purplish), and the morphology of the lip is highly distinct from that of the petals (Martel *et al.*, 2017). This informal group represents around 5% of the *Telipogon* richness and, due to their size and ephemeral lifespan, has fewer collections represented in herbaria and has been less studied than *Telipogon* species with showy flowers.

In Peru, twelve species of miniature *Telipogon* are currently recognized: *T. astroglossus* Rchb.f., *T. bennettii* (Dodson & R.Escobar) N.H.Williams & Dressler, *T. chachapoyensis* C.Martel & Collantes, *T. choquequiraoense* C.Martel & Collantes, *T. deuterocuscoensis* J.M.H.Shaw, *T. huancavelicanus* Collantes & C.Martel, *T. mariae-luisae* Gut.Peralta, Charcape & Nauray, *T. pogonostalix* Rchb.f., *T. pseudobulbosus* (D.E.Benn. & Christenson) N.H.Williams & Dressler, *T. selbyanus* N.H.Williams & Dressler, *T. villonacoensis* M.M.Jiménez, Iturralde & C.Martel, and *T. yanesha* L.Valenz. & Nauray (Gutiérrez *et al.*, 2023; Jiménez *et al*., 2025; Martel *et al.*, 2017, 2020a, 2026; Valenzuela-Gamarra & Nauray-Huari, 2025). Interestingly, only three of these have an auriculate or alate column (i.e., *T. astroglossus*, *T. chachapoyensis*, *T. mariae-luisae*). However, field explorations are expected to reveal undescribed taxa in the coming years.

During explorations in the cloud forests of the northern Peruvian Andes, some miniature *Telipogon* were spotted in different forest patches, two of which were collected. After a careful morphological examination, we concluded that these *Telipogon* plants belonged to an undescribed species. Therefore, we propose a new miniature *Telipogon* species that is very distinctive from any other previously described *Telipogon*.

Materials and methods. More than ten specimens of the new species were found during botanical expeditions in La Palma, province of Chota, Cajamarca, Peru, in 2020 and 2022. In 2022, two plants were collected and cultivated *ex situ* independently by two of the authors (JACG and GIV), which flowered a few months later. Plant material was collected from these two specimens and preserved in spirit (the inflorescence) and dried (vegetative organs). Vegetative and floral characters were analysed and measured using a stereomicroscope. Spirit-preserved material was used to prepare the line drawing. One of these plants was deposited as a herbarium specimen in the Universidad Nacional de Cajamarca (CPUN). After concluding the plants belonged to an undescribed species, another specimen was located at the herbarium of the Universidad Nacional Autónoma de Chota (UNACH), which was collected and photographed independently by two of the other authors (WTR and JDE) in 2020. In total, three specimens were examined; pictures of plant and floral material on graph paper were digitally processed to assess character measurements. *In situ* and *ex situ* photographs were taken with a Nikon COOLPIX P5 and a Nikon D850 equipped with Nikkor lenses at the UNACH. The photographs were used to prepare the figures and plates. Figures and a composite digital line drawing were prepared from the type specimen images in Adobe Photoshop® 2019. We calculated the extent of occurrence (EOO) and area of occupancy (AOO) of the new species using GeoCAT (Bachman *et al*., 2011, https://geocat.iucnredlist.org), which were used to prepare a preliminary conservation assessment following the IUCN (2024) criteria. Terminology used follows Beentje (2012).

Taxonomic treatment

Telipogon vasqueznunezii C.Martel, Chamaya & Iberico, ***sp. nov.*** (Fig. 1–3)

TYPE: Peru. Cajamarca: Prov. Chota, Dist. Chota, Comunidad La Palma, Bosque La Palma, 17M, 762792.33 E, 9281337 S, 2835 m, 28 Sept. 2022, *J. Chamaya G. 106* (holotype: CPUN!).

Diagnosis: *Telipogon vasqueznunezii* is most similar to *Telipogon hystrix* (Dodson) N.H.Williams & Dressler but is distinguished by the larger flowers (9–11 × 8–13 mm *vs.* 5 × 5 mm), the obovate to sub-oblong petals (*vs.* narrowly ovate), the oblong-ligulate lip (*vs.* elliptical to oblong), the sub-auriculate lip base with a pair of small lobes (*vs.* the sagittate base with two long lobes), the absence of a protrusion on the lip (*vs.* a hump-like protrusion on the lower half), and one tuft of acicular setae on the columnar appendix (*vs.* one tuft of setae with a stellate apex on the columnar appendix).

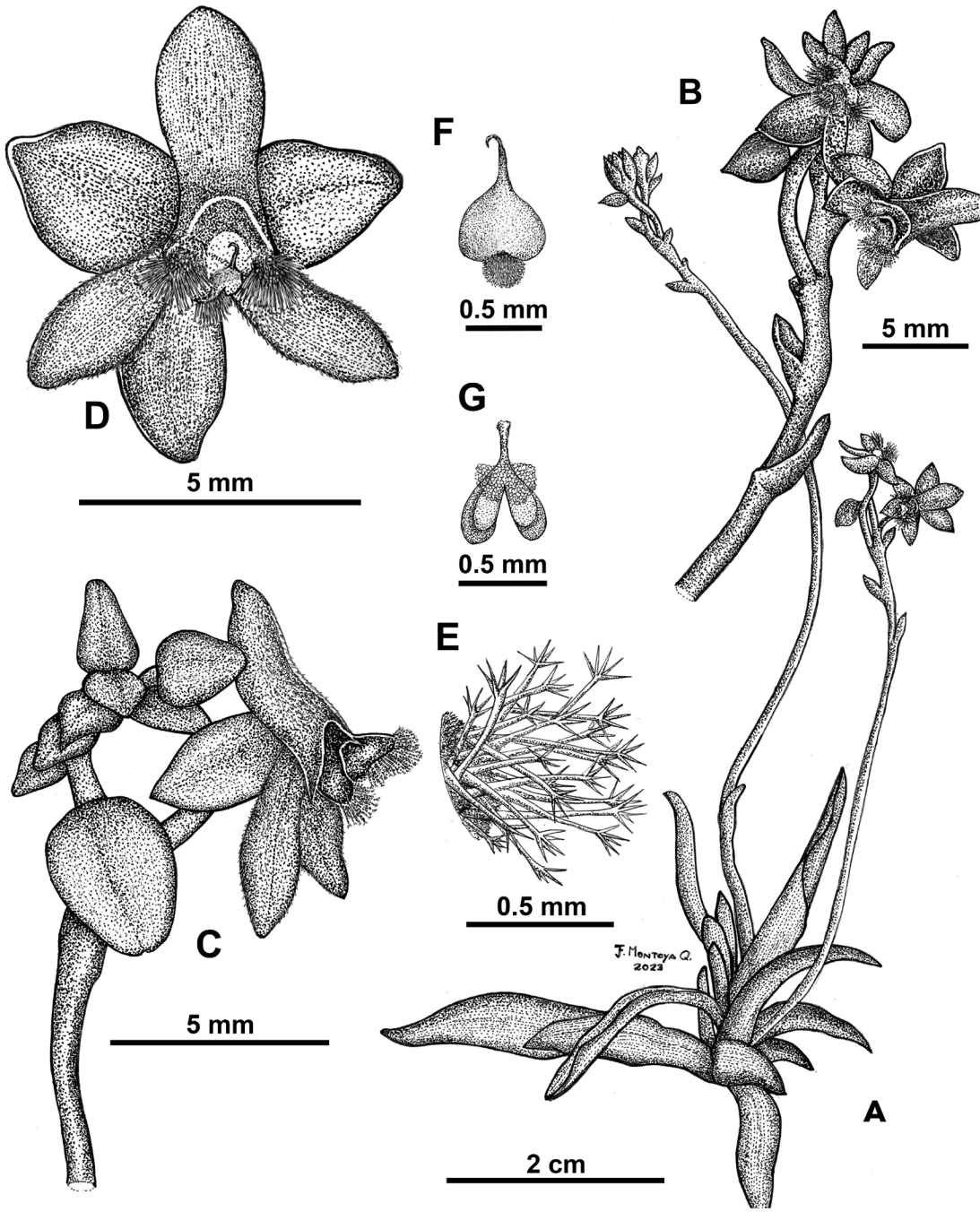

Figure 1. *Telipogon vasqueznunezii*. **A**. Habit. **B**. Portion of inflorescence with flowers. **C**. Flower, lateral view. **D**. Flower, ¾ view. **E**. Details of setae with stellate apices. **F**. Anther cap with pollinarium and tuft of setae on the columnar appendix, ventral view. **G**. Pollinarium, ventral view. Based on *J.Chamaya 106* (holotype CPUN). Drawn by Juan F. Montoya Quino.

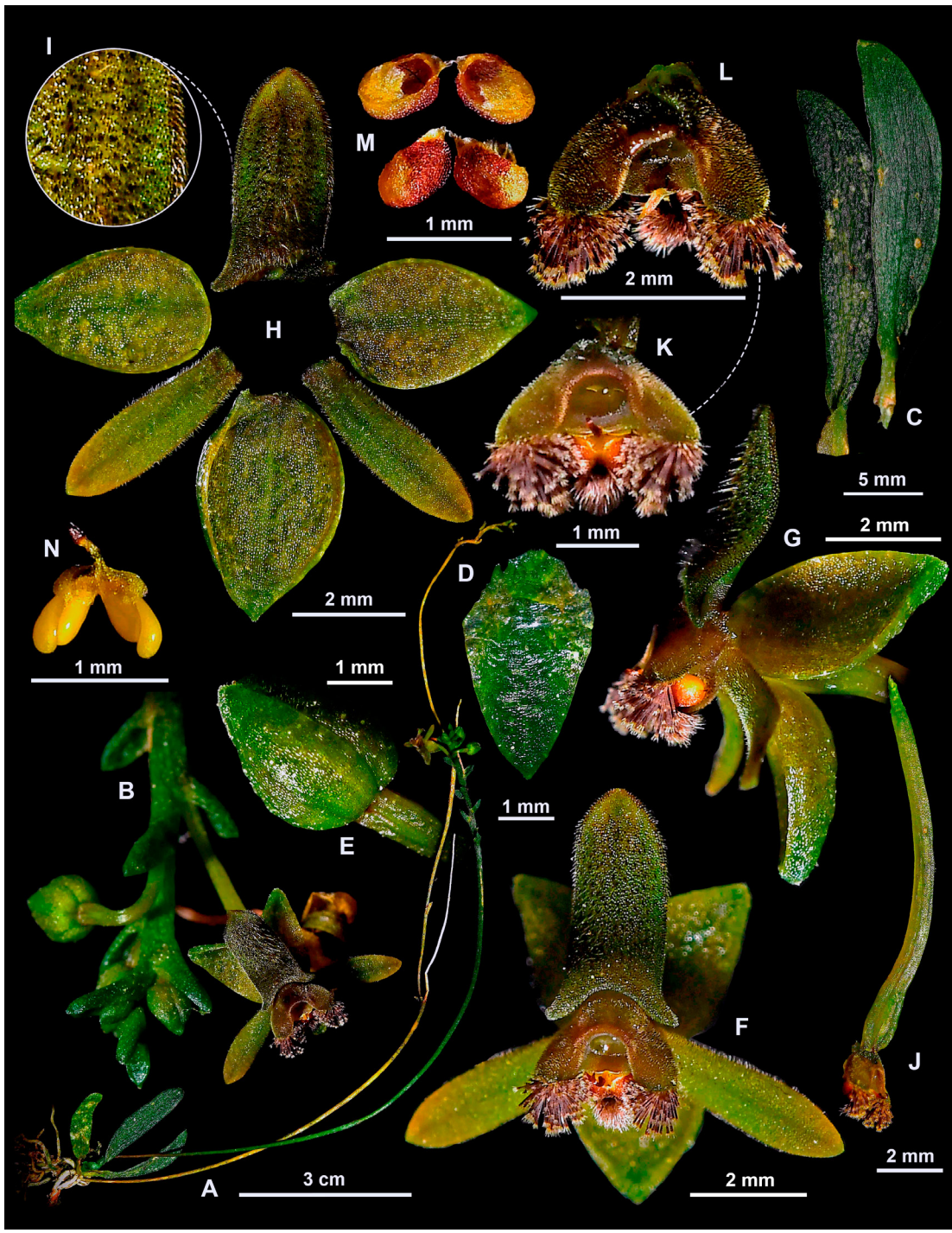

FIGURE 2. *Telipogon vasqueznunezii*. **A**. Habit. **B**. Portion of inflorescence with flowers. **C**. Leaves. **D**. Bract of the inflorescence. **E**. Flower bud. **F**. Flower, frontal view. **G**. Flower, lateral view. **H**. Dissected flower. **I**. Details of the lip trichomes. **J**. Ovary and column, lateral view. **K**. Column, frontal view. **L**. Column, ventral view. **M**. Anther cap, frontal and dorsal views. **N**. Pollinarium. Based on *W. Tafur 131* (UNACH). Plate prepared by Jose D. Edquén.

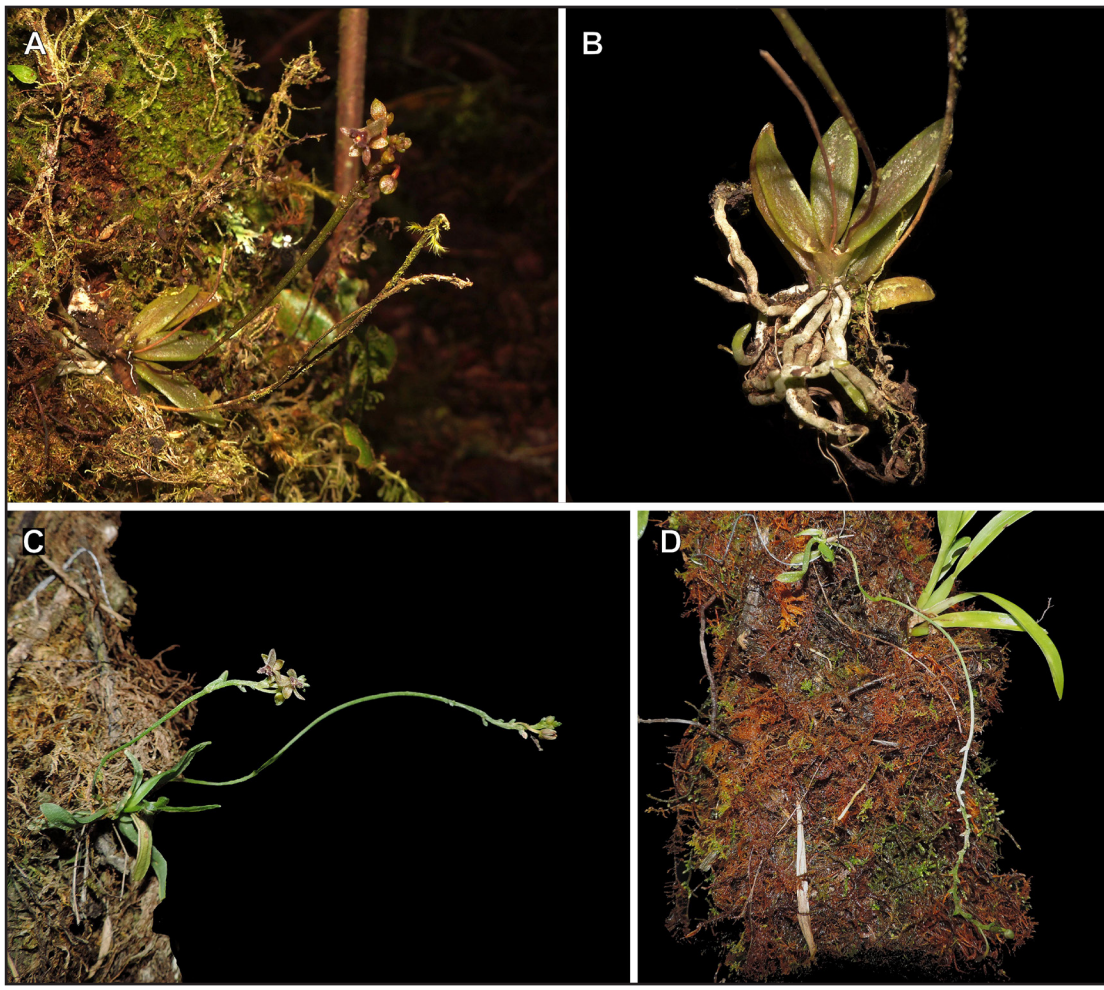

Figure 3. *Telipogon vasqueznunezii*. **A**. Plant *in situ*. **B**. Vegetative plant. **C**. Two plants with sub-erect inflorescences. **D**. The same individual shown in the background in **C**, with the inflorescence becoming pendant during further development. Photos by James A. Chamaya G.

Plant epiphytic, up to 25 cm tall, including the inflorescence. *Roots* 0.3–0.5 mm in diameter, fleshy, cylindrical, basal. *Leaves* 2.0–3.4 × 0.5–0.8 mm, 3–5, sub-coriaceous, distichous, obovate-oblong, slightly falcate, acute, articulated to a short decurrent, conduplicate leaf sheath. *Inflorescence* apical and lateral, erect or pendant, sub-terete, racemose, branched, green, up to 23 cm long, 5–10 flowered produced in succession, spirally arranged, one or two flowers open at a time; *peduncle* up to 10 cm, complanate, with 1 amplexicaul triangular bract apically; *rachis* up to 12 cm, slightly subterete, sub-verrucose; *floral bracts* 3.9 × 2.3 mm, conduplicate, triangular-ovate, acute. *Ovary* up to 13 mm long, sub-terete, green, pedicellate; *pedicel* sub-terete, arching. *Flowers* 9–11 × 8–13 mm, non-resupinate. *Sepals* free, 1-veined, ovate, acute, adaxially papillose, entire, membranous, mustard yellow to pale green; *dorsal sepal* 4.1–4.4 × 2.1–2.3 mm, slightly concave basally; *lateral sepals* 4.6–4.8 × 2.3–2.5 mm, slightly concave, oblique. *Petals* 3.9–4.1 × 0.9–1.1 mm, narrowly obovate to sub-oblong, light green to pale red, pilose, ciliate, truncate base, acute apex, 1-veined. *Lip* 3.8–4.1 × 1.6–1.8 mm, oblong-ligulate, green to pale red, sessile, with a pair of small lobes at the base, ecallose, densely pilose, ciliate, 3-veined. *Column* 2.2–2.4 × 2.4–2.6 mm, biauriculate, sessile, light green

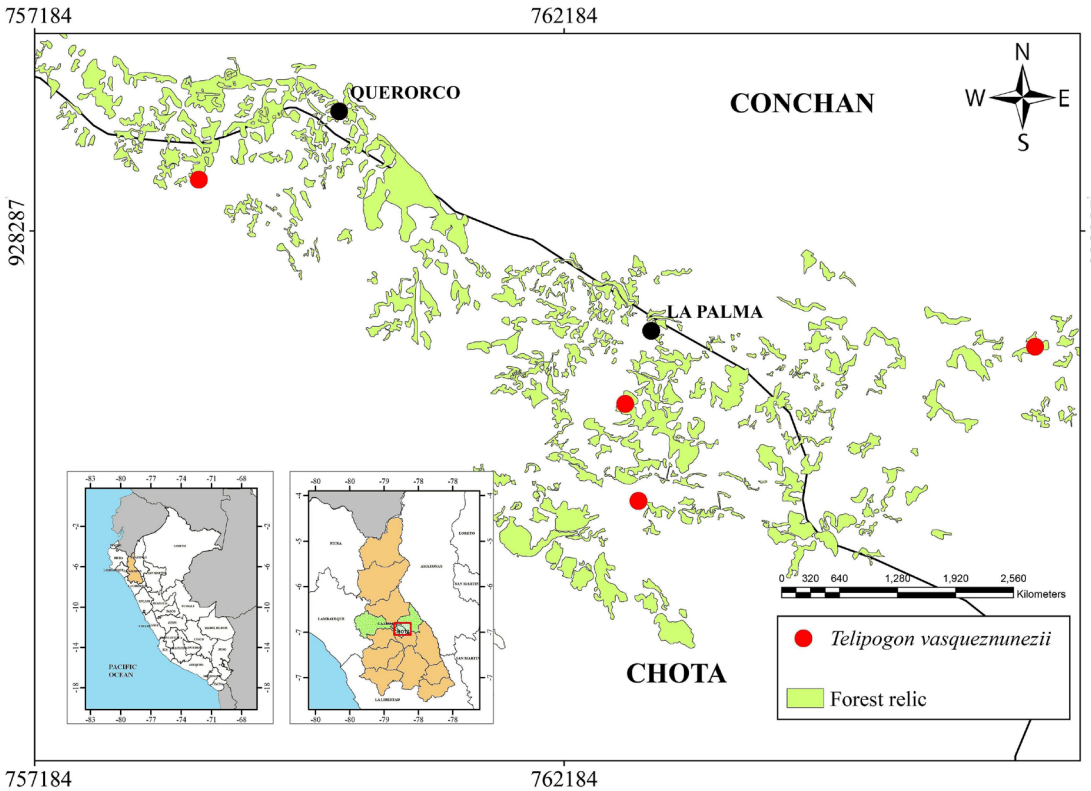

FIGURE 4. Distribution map of *Telipogon vasqueznunezii* in northern Peru. Prepared by James A. Chamaya G.

to wine red, densely shortly hirsute, with a dorsal appendix whose superior margin is rounded and lip-like; *columnar auricle* elliptic, laminar, apex rounded, densely setose, 1 tuft of setae on each auricle towards the apex, setae purplish and stellate; *columnar appendix* densely setose towards the apical half, setae acicular and purple to white, acicular. *Stigma* apical, elliptic; *rostellum* erect; *anther* dorsal. *Anther cap* oblong, 0.7 × 1.25 mm, bilocular, purple suffused with yellow. *Pollinarium* 1.1 mm long, with two unequal pairs, narrowly ovoid *pollinia*, *stipe* 0.3 mm long, *viscidium* uncinate. *Fruit* capsule, 7.5 × 5.0 mm.

EPONYMY: The species is named after Dr Leopoldo Pompeyo Vásquez Núñez, a Peruvian botanist and professor at Universidad Nacional Pedro Ruiz Gallo. Professor Vásquez has dedicated his life to better understanding the plant diversity of northern Peru with a focus on potentially useful plants.

DISTRIBUTION: *Telipogon vasqueznunezii* is found in the montane forests of Querorco montane range, in northern Peru, on the western Andean slopes (Fig. 4). Plants of this species naturally grow as epiphytes on shrub branches and tree trunks in areas not fully exposed to sunlight (Johansson's Zone II). The collected and recorded specimens came from La Palma forest (Fig. 4), a set of fragmented forest patches with small remnants of pristine vegetation in which *Clusia* sp. *Weinmannia* sp., *Myrcianthes* sp., and *Clethra* sp. are the dominant tree species. The ecosystem of this area is classified by the Peruvian state as relic forests of the Western slopes (in Spanish: Bosque relicto montano de vertiente occidental; Ministerio del Ambiente, 2019), which is characterized by dense, fragmented cloud forest with trees up to 20 m, with abundant epiphytes. This ecosystem is found on the western slopes of the Andes in northern Peru. Including the type locality, four patches of the new species are currently known (Fig. 4).

Phenology: *Telipogon vasqueznunezii* plants were recorded in flower between July and September, so they will flower during the southern hemisphere's dry season.

Conservation status: *Telipogon vasqueznunezii* is only known from four nearby locations in the relic forests of northern Peru (Fig. 4). These forests are disturbed and fragmented, and their extent has mainly decreased in the last 40 years. The main threats to the species are habitat loss and degradation due to land conversion. Its estimated EOO is 9.33 km^2 and its AOO is estimated at 16 km^2. Therefore, following the IUCN (2024) criteria, *T. vasqueznunezii* is assessed as Critically Endangered based on criteria B1 and B2 (CR, B1ab(i,iii), B2ab(ii,iii)).

Additional specimens examined: Peru. Cajamarca: Prov. Chota, Dist. Conchán, Bosque La Palma, 6°29'32.2" S 78°35'40.5" W, 2950 m. 8 Sept. 2020, *W. Tafur, M. Enco & J. Edquén 131* (UNACH!).

Taxonomic discussion: *Telipogon vasqueznunezii* is most similar to *T. hystrix* (Table 1) by the inflorescence with a slightly sub-terete rachis, the greenish flowers, the ovate lateral sepals, the ciliate petal margins, the pubescent lip with ciliate margins, the occurrence of two columnar auricles and a columnar appendix, and the setae on the columnar auricles having stellate apices (Fig. 5). Nevertheless, the new species is distinguished by its larger flowers (*T. vasqueznunezii*: 9–11 × 8–13 mm *vs. T. hystrix*: 5 × 5 mm), the obovate to sub-oblong petals (*vs.* narrowly ovate), the oblong-ligulate lip with auriculate base presenting two small lateral lobes (*vs.* elliptical to oblong lip with sagittate base presenting long lobes), the absence of a protrusion on the lip (*vs.* a hump-like protrusion on the lower half), and a tuft of acicular setae on the columnar appendix (*vs.* a tuft of setae with stellate apexes on the columnar appendix). Furthermore, *T. vasqueznunezii* is known so far only from the western Andean slopes in northern Peru, whereas *T. hystrix* is known from the eastern Andean slopes of central Ecuador, 550 km away in a straight line. *Telipogon vasqueznunezii* is also morphologically similar to *T. reventadorensis* N.H.Williams & Dressler (ex *Stellilabium vulcanicum* Dodson & Hirtz), but morphological and genetic evidence support the inclusion of *T. reventadorensis* as a synonym of *T. hystrix* (Jiménez *et al*., in prep.).

Telipogon vasqueznunezii is also similar to *T. embreei* N.H.Williams & Dressler (ex *Stellilabium frymirei* Dodson). They both share the inflorescence with similar-sized flowers (*T. vasqueznunezii*: 9–11 × 8–13 mm *vs. T. embreei*: 10 × 11 mm; Table 1), a subterete peduncle, the ciliate petal margins, the pilose lip with ciliate margins, the occurrence of two columnar auricles and a columnar appendix, the tufts of setae with stellate apex on the columnar auricles, and the tuft of acicular setae on the columnar appendix. Nevertheless, *T. vasqueznunezii* is distinguished by the light green to pale red flowers (*vs.* brown flowers), the narrowly obovate to sub-oblong petals (*vs.* elliptical petals), the oblong-ligulate lip (*vs.* ovate lip), the small pair of lobes at the lip base (*vs.* longer and falcate lobes), and the stiff trichomes throughout the lip (*vs.* 5 veins with stellate trichomes). *Telipogon embreei* occurs on the eastern slopes of the Ecuadorian Andes, approximately 250 km in a straight line north of the recorded localities of *T. vasqueznunezii.*

In Peru, *T. vasqueznunezii* is morphologically more similar to *T. astroglossus* (Table 1). However, it is easily discriminated by the oblong-ligulate lip with two small basal lobes (*vs.* triangular lip with hastate base), the absence of a protrusion on the lip (*vs.* a hump-like protrusion on the lower half), and the setae with stellate apex on the columnar auricles (*vs.* acicular setae on the columnar auricles).

Telipogon vasqueznunezii belongs to what we propose here as the "*T. astroglossus* group", an informal group restricted to South America and characterised by having small plants with small flowers (around 1 cm or less), terete to sub-terete rachis, and a column bearing a pair of non-alate setose columnar auricles and a setose columnar appendix. This group includes six species *T. astroglossus*, *T. calueri* N.H.Williams & Dressler, *T. embreei*, *T. hystrix, T. roberti* N.H.Williams & Dressler, and *T. vasqueznunezii*. Garay & Romero (1998) and Dressler (1999) previously grouped most of these species within *Dipterostele* Schltr. and *Stellilabium* section *Dipterostele* Dressler, respectively, based on the presence of lobes in the column. Interestingly, they did not include *T. astroglossus*; instead, they grouped it with *T. pogo-*

Table 1. Comparison of characters between *T. vasqueznunezii* and morphologically similar species. Flower characteristics extracted from: [1]Dodson and Dodson (1980), [2]Dodson and Dodson (1982).

Flower character	***Telipogon vasqueznunezii***	***Telipogon astroglossus*** [1]	***Telipogon embreei*** [2]	***Telipogon hystrix*** [2]
Flower diameter (mm)	9–11 × 8–13	6.2 × 5.9	10 × 11	5 × 5
Dorsal sepal dimensions (mm) and shape	4.1–4.4 × 2.1–2.3, ovate	3 × 3, broadly ovate	6 × 3, ovate	3.0 × 1.2, narrowly elliptical
Petals dimensions (mm) and shape	3.9–4.1 × 0.9–1.1, obovate to sub-oblong	4.0 × 2.2, obovate	6.0 × 3.5, elliptical	3.0 × 1.5, narrowly ovate
Lip dimensions (mm) and shape	3.8–4.1 × 1.6–1.8, oblong-ligulate, auriculate base with two small lateral lobes	5 × 3, ovate, sagittate base	4.2 × 2.1, ovate, sub-auriculate base with falcate appendages	4.2 × 2.1, elliptical to oblong, sagittate base with long lobes
Adaxial lip surface	densely pilose	disc with a rounded pubescent pad	5 parallel, stellate-pubescent veins	puberulent with a hump-like protrusion on the lower half
Seta shape on the columnar auricle	setae with stellate apexes	acicular setae	setae with stellate apexes	setae with stellate apexes
Seta shape on the columnar apex	acicular setae	acicular setae	acicular setae	setae with stellate apexes

Figure 5. Comparison of flowers of *Telipogon vasqueznunezii* and *T. hystrix*. **A**. Flower of *T. vasqueznunezii*, ¾ view. **B**. Flower of *T. vasqueznunezii*, lateral view. **C**. Flower of *T. hystrix*, ¾ view. **D**. Flower of *T. hystrix*, lateral view. Photos by James A. Chamaya G. (A–B) and Gabriel Iturralde (C–D).

nostalix Rchb.f. in the *Stellilabium* section *Stellilabium*, which differs markedly in floral morphology. Moreover, *Dipterostele* (sensu Garay & Romero, 1998). and *Stellilabium* section *Dipterostele* (sensu Dressler, 1999) included *T. microglossus* (Schltr.) N.H.Williams & Dressler and *T. morganiae* (Dodson) N.H.Williams & Dressler, species currently considered within the *Telipogon microglossus* group, which are characterized by presenting two columnar alate appendices (Martel *et al.*, 2020a). The species of this informal group are distributed in the Tropical Andes of Ecuador, Peru and Bolivia.

Key for species of the *Telipogon astroglossus* group

1. Lip with an acute or acuminate apex 2
1b. Lip with an auriculate apex ..... ***T. roberti***
2. Lip without a protrusion on the lower half, apex of the column without stellate setae 3
2b. Lip with a hump-like protrusion on the lower half, apex of the column with stellate setae ..... ***T. hystrix***
3. Auricles of the column with acicular or subulate setae 4
3b. Auricles of the column with stellate setae 5
4. Lip ovate with a rounded pubescent pad, auricles of the column with acicular setae ..... ***T. astroglossus***
4b. Lip transversely cordate and basally strongly falcate with scattered setae, auricles of the column with subulate setae ..... ***T. calueri***
5. Lip oblong-ligulate with an auriculate base and two small lateral lobes, densely pilose ..... ***T. vasqueznunezii***
5b. Lip ovate with a subauriculate base and falcate appendages, 5 parallel, stellate-pubescent veins ..... ***T. embreei***

Acknowledgements. We thank the Peruvian Ministry of Agriculture and SERFOR for issuing the collection permit. JACG thanks Óscar Cabrera for allowing him to explore his terrains, where the species was found. JACG and WTR collected specimens of the new species during the development of their respective thesis projects. WTR's thesis was economically supported by the Universidad Nacional Autónoma de Chota-UNACH (funds from the mining royalties). CM expresses gratitude to the Dirección de Fomento de la Investigación at the Pontificia Universidad Católica del Perú (Grant PI1111) and PROCIENCIA (Convenio N° 126-2020-FONDECYT) for supporting his research through research grants. GAI thanks the Universidad de Las Américas for funding orchid research in Ecuador (Grant N° 527.A.XV.24).

Permits. Samples were collected under collecting permits issued by SERFOR (AUT-IFL-2022-051 and RD N° D000247-2016-SERFOR/DGGSPFFS; RD N° D000047-2022-MIDAGRI-SERFOR-DGGSPFFS-DGSPF).

Funding. Dirección de Fomento de la Investigación at the Pontificia Universidad Católica del Perú (Grant PI1111), PROCIENCIA (Convenio N° 126-2020-FONDECYT), and Universidad de Las Américas (Grant N° 527.A.XV.24).

Author contribution. CM: taxonomic assessments, writing the first draft and coordinating revisions. JACG: field work, photography, specimen preparation. GIV: logistics, specimen preparation. JDE: field work, photography, specimen preparation. WTR: field work, specimen preparation. GAI: taxonomic assessments. All authors have revised and approved the manuscript.

Conflict of interest. The authors declare that they have no known competing financial interests or relationships that could be construed to influence this work.

Literature cited

Bachman, S., Moat, J., Hill, A., de la Torre, J. & Scott, B. (2011). Supporting Red List threat assessments with GeoCAT: geospatial conservation assessment tool. *ZooKeys*, *150*, 117–126. https://doi.org/10.3897/zookeys.150.2109

Beentje, H. (2012). The Kew Plant Glossary: An Illustrated Dictionary of Plant Terms. Royal Botanic Gardens, Kew. Kew Publishing, Richmond, UK.

Collantes, B. & Martel, C. (2015). *Telipogon koechlinorum* (Orchidaceae), a new species from Machu Picchu, Peru. *Brittonia, 67*, 113–117. https://doi.org/10.1007/s12228-015-9363-7

Collantes, B. & Martel, C. (2016). Notes and description amendment of *Telipogon phuyupatamarcensis* (Orchidaceae). *Lankesteriana, 16*, 123–127. https://doi.org/10.15517/lank.v16i2.25394

Dodson, C. H. & Dodson, P. M. (1980). *Orchids of Ecuador. Icones Plantarum Tropicarum 4: t. 301–400*. The Marie Selby Botanical Gardens, Sarasota.

Dodson, C. H. & Dodson, P. M. (1982). *Orchids of Ecuador, Icones Plantarum Tropicarum 5: t. 401–500*. The Marie Selby Botanical Gardens, Sarasota.

Dressler, R. L. (1999). A reconsideration of *Stellilabium* and *Dipterostele*. *Harvard Papers on Botany, 4*, 469–473. https://doi.org/http://www.jstor.org/stable/41761584

Garay, L. A., & Romero-González, G. A. (1998). Schedulae Orchidum. *Harvard Papers in Botany*, *3*, 53–62. http://www.jstor.org/stable/41761555

Gutiérrez, H., Castañeda, R., Charcape-Ravelo, M., Infante, Y. A., Sotelo, A., Correa, V. & Nauray, W. (2023). *Telipogon mariae-luisae* (Orchidaceae: Oncidiinae) una nueva especie del norte del Perú. *Darwiniana, Nueva Serie, 11*, 446–451. https://doi.org/10.14522/darwiniana.2023.112.1123

IUCN. (2024). *IUCN Standards and Petitions Committee. 2024. Guidelines for using the IUCN Red List categories and criteria. Version 16*. Prepared by the Standards and Petitions Committee. https://www.iucnredlist.org/resources/redlist-guidelines. [Accessed 20 April 2025.]

Jiménez, M. M., Baquero, L., Garzón-Suárez, H. X., Martel, C., Chamaya G., J. A., Lapo-González, N., Werner, F. A. & Iturralde, G. A. (2025). *Telipogon villonacoensis* (Orchidaceae: Oncidiinae), a new species with an unexpectedly wide distribution from the northern and central Andes of South America. *Plant Ecology and Evolution*, 158, 392–402. https://doi.org/10.5091/plecevo.157554

Martel, C. (2016). New records for two Peruvian endemic *Telipogon* (Orchidaceae) including an unexpected record of *Telipogon ariasii*. *Revista Peruana de Biología, 23*, 43–46. https://doi.org/10.15381/rpb.v23i1.11832

Martel, C., Collantes, B. & Egoavil, L. (2017). *Telipogon huancavelicanus* sp. nov. (Orchidaceae) from Peru, and an updated description of *T. deuterocuscoensis*. *Nordic Journal of Botany, 35*, 539–545. https://doi.org/10.1111/njb.01520

Martel, C., Edquen, J., Collantes, B. & Ocupa, L. (2020a). *Telipogon chachapoyensis* (Orchidaceae), a new species from Peru similar to *T. microglossus*. *Systematic Botany, 45*, 227–232. https://doi.org/10.1600/036364420X15862837791285

Martel, C. & Nauray Huary, W. (2013). Notes and emended description of *Telipogon peruvianus* T. Hashim. (Orchidaceae). *Candollea*, *68*, 245–250. https://doi.org/10.15553/c2012v682a8

Martel, C., Neubig, K. M., Williams, N. H. & Ayasse, M. (2020b). The uncinate viscidium and floral setae, an evolutionary innovation and exaptation to increase pollination success in the *Telipogon* alliance (Orchidaceae: Oncidiinae). *Organisms Diversity & Evolution*, *20*, 537–550. https://doi.org/10.1007/s13127-020-00457-w

Martel, C., Villafuerte, M., Yuca, J., Vilca-Bustamante, L. L. & Collantes, B. (2026). *Telipogon choquequiraoense*, a new orchid species from Choquequirao, an Inca archaeological site in Southern Peru. *Brittonia*, *78*, 1–7. https://doi.org/10.1007/s12228-025-09864-9

Ministerio del Ambiente. (2019). *Mapa nacional de ecosistemas del Perú: Memoria descriptiva*. Ministerio del Ambiente, Lima.

Valenzuela-Gamarra, L. & Nauray-Huari, W. (2025). A new species of *Telipogon* (Orchidaceae: Oncidiinae) in the Central Peruvian Amazon. *Phytotaxa*, *720*, 131–139. https://doi.org/10.11646/phytotaxa.720.2.3

Williams, N. H., Whitten, W. M., & Dressler, R. L. (2005). Molecular systematics of *Telipogon* (Orchidaceae: Oncidiinae) and its allies: nuclear and plastid DNA sequence data. *Lankesteriana, 5*, 163–184. http://www.redalyc.org/articulo.oa?id=44339809001