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Draft genome assemblies of 59 strains of the Ralstonia solanacearum species complex

Eva Caly-Simbou
CIRAD, UMR PVBMT
Quentin Piet
CIRAD, UMR PVBMT
Marie Veronique Nomenjanahary
University of Reunion Island
Stéphanie Javegny
CIRAD, UMR PVBMT
Jean-Jacques Chéron
CIRAD, UMR PVBMT
Mirana Gauche
University of Reunion Island
Nathalie Becker
Institut de Systématique, Biodiversité (ISyEB), Muséum national d'Histoire naturelle, CNRS, Sorbonne Université, EPHE, Université des Antilles
Santatra Ravelomanantsoa
FOFIFA, National Center of Applied Research for Rural Development
Philippe Laurent
University of Reunion Island
Isabelle Robène
CIRAD, UMR PVBMT
Stéphane Ramin-Mangata
University of Reunion Island
Gilles Cellier
Agence Nationale de Sécurité Sanitaire de l'Alimentation, de l'Environnement et du Travail
Stéphane Poussier
University of Reunion Island
Yann Pecrix
yann.pecrix@cirad.fr

CIRAD, UMR PVBMT

Data Note

Keywords:

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Draft genome assemblies of 59 strains of the *Ralstonia solanacearum* species complex

Eva Caly-Simbou[1†], Quentin Piet[1†], Marie Veronique Nomenjanahary[2], Stéphanie Javegny[1], Jean-Jacques Chéron[1], Mirana Gauche[2], Nathalie Becker[3], Santatra Ravelomanantsoa[4], Philippe Laurent[2], Isabelle Robène[1], Stéphane Ramin-Mangata[2], Gilles Cellier[5], Stéphane Poussier[2], Yann Pecrix[1]*

[1] CIRAD, UMR PVBMT, F-97455 Saint-Pierre, La Réunion, France
[2] University of Reunion Island, UMR PVBMT, 97410 Saint-Pierre, Reunion Island, France
[3] Institut de Systématique, Évolution, Biodiversité (ISyEB), Muséum national d'Histoire naturelle, CNRS, Sorbonne Université, EPHE, Université des Antilles, 57 rue Cuvier, CP 50, 75005 Paris, France
[4] FOFIFA, National Center of Applied Research for Rural Development, Department of Agricultural Research (DRA), Antananarivo, Madagascar
[5] Anses, Plant Health Laboratory, Tropical Pest and Diseases Unit, Saint-Pierre, La Réunion, France
[†] These authors contributed equally to this wok.

* Correspondence: Yann Pecrix, yann.pecrix@cirad.fr

Eva Caly-Simbou: eva.caly_simbou@cirad.fr
https://orcid.org/0009-0003-5781-9922

Quentin Piet: quentin.piet@cirad.fr
https://orcid.org/0000-0003-3135-1092

Marie Veronique Nomenjanahary: marie-veronique.nomenjanahary@univ-reunion.fr
https://orcid.org/0009-0003-9801-1954

Stéphanie Javegny: stephanie.javegny@cirad.fr

Jean-Jacques Chéron: jean-jacques.cheron@cirad.fr

Mirana Gauche: miharisoa-mirana.gauche@cirad.fr
https://orcid.org/0009-0000-0529-5360

Nathalie Becker: nathalie.becker@cirad.fr
https://orcid.org/0000-0002-9187-3549

Santatra Ravelomanantsoa : santatrah.ravelomanantsoa@gmail.com
https://orcid.org/0000-0002-6716-5796

Philippe Laurent: philippe.laurent@univ-reunion.fr
https://orcid.org/0009-0001-4594-369X

Isabelle Robène: isabelle.robene@cirad.fr
https://orcid.org/0000-0003-2012-4652

Stéphane Ramin-Mangata: stephane.ramin-mangata@univ-reunion.fr
https://orcid.org/0000-0002-3865-9084

Gilles Cellier: gilles.cellier@anses.fr
https://orcid.org/0000-0003-2587-3169

Stéphane Poussier: stephane.poussier@univ-reunion.fr
https://orcid.org/0000-0003-0273-3518

Yann Pecrix: yann.pecrix@cirad.fr
https://orcid.org/0000-0002-6537-3145

Abstract

Objectives:

The *Ralstonia solanacearum* species complex (RSSC) is a globally distributed soil-borne bacterial pathogen responsible for the bacterial wilt disease, impacting numerous economically important crops. Owing to its high genetic and geographical diversity, the RSSC is subdivided into four phylotypes and sequevars. This study aimed to expand the genomic resources available for RSSC by generating new high-quality whole-genome sequences from genetically and geographically diverse strains. By enriching public databases with underrepresented genomes, this dataset provides valuable resources for comparative genomics, phylogenetic studies, and the development of improved molecular diagnostic tools.

Data description:

The dataset included 59 RSSC strains representing three phylotypes, collected from 20 countries between 1959 and 2021. Combined with publicly available genomes, the final dataset comprised 1,133 RSSC genomes. Phylogenetic analyses confirmed previous assignments, and newly sequenced genomes broadened the representation of genetic diversity within the RSSC. A total of 5,504,641 genes, corresponding to 20,906 gene families were identified. Among these, 3,340 gene families constituted the core genome, while 17,566 belonged to the accessory genome. Importantly, 414 gene families were detected exclusively in the newly sequenced genomes, highlighting their contribution to the accessory genomic diversity of the RSSC.

Keywords

The *Ralstonia solanacearum* complex species, Bacterial wilt, Whole-genome sequencing, Pangenome.

Objective

The *Ralstonia solanacearum* species complex (RSSC) is a globally widespread soil-borne bacterial pathogen, responsible for bacterial wilt in a wide range of economically important crops [1, 2]. Due to its genetic, ecological, and geographical variability, RSSC is considered as a species complex which is divided into phylotypes, that reflect distinct geographical origins: Phylotype I (Asia), Phylotype IIA and IIB (the Americas), Phylotype III (Africa), and Phylotype IV (Indonesia-Australia) [3]. A further subclassification into sequevars is based on sequence similarity within a partial region of the endoglucanase encoding gene (*egl*) [4].

Whole-genome sequencing has become a key approach for investigating the RSSC diversity. Several genomic resources for the RSSC, including complete or draft genomes from diverse geographic origins and host plants, have already been published [5–13]. Collectively, these studies have enriched the public database and provided a better understanding of the genetic diversity of this pathogen.

However, it remains essential to expand RSSC genomic datasets to better understand the evolution, population structure, and epidemiology of RSSC.

To this aim, we provided high-quality whole-genome sequences of 59 strains originating from diverse geographical regions, representing different phylotypes and sequevars, and isolated over a broad time span (1959-2021). By expanding the diversity of publicly available genomes, the dataset of this study will support comparative genomic studies, facilitate phylogenetic analyses, and provide a valuable resource for the development of improved molecular diagnostic tools.

Data description

The RSSC strains selected for this study were obtained from the RUN collection, hosted by the PVBMT research unit (CIRAD–University of La Réunion). They comprised representatives of phylotypes I, IIA, IIB and III collected from 20 countries between 1959 and 2021 (DataFile 1 and DataFile 2).

High molecular genomic DNA was extracted using a protocol adapted for the RSSC strains [8], and sequencing was performed by Genewiz-Azenta (Leipzig, Germany) using Illumina NovaSeq technology. Illumina paired-end reads from 59 RSSC strains (DataSets 1-59) were filtered with fastp v0.23.4 [14]. Sequencing adapters were automatically detected and trimmed, while low quality reads (>= 40% nucleotides with a Phred score <= 15) and reads shorter than 35 bp were removed. The resulting reads were assembled with Unicycler version 0.5.1 (DataSets 1-118).

Genome completeness and contamination were evaluated with BUSCO v6.0.0 [15] using the burkholderiales_odb12 lineage dataset, and CheckM v1.2.2 [16], respectively, while assembly metrics were obtained with QUAST v5.3.0 [17] (DataFile 1). Genome affiliation to the RSSC was assessed using Mashtree v1.4.6 [18], with the parameters --mindepth 0 and --genome_size 5 Mb, followed by phylotype assignment based on their placement in the Mashtree phylogeny. Assemblies with BUSCO and CheckM completeness ≥98% and CheckM contamination ≤10% were retained. Among those accessions, 42 belonged to phylotype I, 9 to phylotype IIA, 3 to phylotype IIB and 5 to phylotype III. The CheckM completeness metrics of the final dataset ranged from 99.48% to 99.94%, whereas the highest CheckM contamination value reached 0.83%. The GC content ranged from 66.45% to 67.21%.

To compare the 59 newly sequenced genomes with publicly available resources, 1,074 genomes were retrieved from GenBank (February 2026) and filtered using the same quality criteria. To accurately assess their position within the broader genomic diversity, phylogenetic analyses were performed using phylotype-specific core genome alignments generated with Parsnp v2.1.4 [19] from the resulting dataset of 1,133 genomes. Recombinant regions were identified and masked using Gubbins v3.4.3 [20] and maximum-likelihood phylogenies were inferred with IQ-TREE v3.0.1 [21], using ModelFinder for model selection [22], 1,000 ultrafast bootstrap replicates [23] to estimate branch support and the --bnni option. Analyses were initialized with a random seed of 2 (DataFiles 3-6). The resulting trees showed no incongruence at the phylotype level, but confirmed the polyphyletic nature of several sequevars. This result was previously observed in phylotype I [24] and attributed to horizontal gene transfer and low diversity.

The assemblies were annotated using BAKTA v1.8.2 [25]. A pangenome analysis was then performed with PIRATE v1.0.5 [26], using the -k and --diamond parameters for rapid homology searches (DataFile 7). Across the 1,133 genomes, 5,504,641 genes were annotated, corresponding to 20,906 gene families. Among these, 3,340 gene families were present in at least 95% of the genomes and constituted the core genome, while the remaining 17,566 constituted the accessory genome. The number of gene families varied among phylotypes, largely reflecting differences in sampling size. Notably, 414 gene families were detected exclusively in newly sequenced genomes and distributed across phylotypes I, IIA, IIB and III, enhancing accessory genome diversity within the species complex.

Table 1: Overview of data files/data sets.

Label	**Name of data file/data set**	**File types (file extension)**	**Data repository and identifier (DOI or accession number)**
DataSet 1	RUN0009 raw reads	(.fastq.gz)	ENA ERR17701360 https://identifiers.org/ena.embl:ERR17701360 [27]
DataSet 2	RUN0033 raw reads	(.fastq.gz)	ENA ERR17701348 https://identifiers.org/ena.embl:ERR17701348 [28]
DataSet 3	RUN0038 raw reads	(.fastq.gz)	ENA ERR17701320 https://identifiers.org/ena.embl:ERR17701320 [29]
DataSet 4	RUN0044 raw reads	(.fastq.gz)	ENA ERR17701356 https://identifiers.org/ena.embl:ERR17701356 [30]
DataSet 5	RUN0085 raw reads	(.fastq.gz)	ENA ERR17701362 https://identifiers.org/ena.embl:ERR17701362 [31]
DataSet 6	RUN0090 raw reads	(.fastq.gz)	ENA ERR17701351 https://identifiers.org/ena.embl:ERR17701351 [32]
DataSet 7	RUN0102 raw reads	(.fastq.gz)	ENA ERR17701341 https://identifiers.org/ena.embl:ERR17701341 [33]
DataSet 8	RUN0309 raw reads	(.fastq.gz)	ENA ERR17701344 https://identifiers.org/ena.embl:ERR17701344 [34]
DataSet 9	RUN0312 raw reads	(.fastq.gz)	ENA ERR17701340 https://identifiers.org/ena.embl:ERR17701340 [35]
DataSet 10	RUN0323 raw reads	(.fastq.gz)	ENA ERR17701327 https://identifiers.org/ena.embl:ERR17701327 [36]
DataSet 11	RUN0339 raw reads	(.fastq.gz)	ENA ERR17701328 https://identifiers.org/ena.embl:ERR17701328 [37]
DataSet 12	RUN0340 raw reads	(.fastq.gz)	ENA ERR17701355 https://identifiers.org/ena.embl:ERR17701355 [38]
DataSet 13	RUN0345 raw reads	(.fastq.gz)	ENA ERR17701359 https://identifiers.org/ena.embl:ERR17701359 [39]

DataSet 14	RUN0346 raw reads	(.fastq.gz)	ENA ERR17701358 https://identifiers.org/ena.embl:ERR17701358 [40]
DataSet 15	RUN0359 raw reads	(.fastq.gz)	ENA ERR17701353 https://identifiers.org/ena.embl:ERR17701353 [41]
DataSet 16	RUN0434 raw reads	(.fastq.gz)	ENA ERR17701343 https://identifiers.org/ena.embl:ERR17701343 [42]
DataSet 17	RUN0551 raw reads	(.fastq.gz)	ENA ERR17701352 https://identifiers.org/ena.embl:ERR17701352 [43]
DataSet 18	RUN0556 raw reads	(.fastq.gz)	ENA ERR17701322 https://identifiers.org/ena.embl:ERR17701322 [44]
DataSet 19	RUN0624 raw reads	(.fastq.gz)	ENA ERR17701318 https://identifiers.org/ena.embl:ERR17701318 [45]
DataSet 20	RUN0625 raw reads	(.fastq.gz)	ENA ERR17701326 https://identifiers.org/ena.embl:ERR17701326 [46]
DataSet 21	RUN0652 raw reads	(.fastq.gz)	ENA ERR17701321 https://identifiers.org/ena.embl:ERR17701321 [47]
DataSet 22	RUN0671 raw reads	(.fastq.gz)	ENA ERR17701411 https://identifiers.org/ena.embl:ERR17701411 [48]
DataSet 23	RUN0676 raw reads	(.fastq.gz)	ENA ERR17701316 https://identifiers.org/ena.embl:ERR17701316 [49]
DataSet 24	RUN0677 raw reads	(.fastq.gz)	ENA ERR17701334 https://identifiers.org/ena.embl:ERR17701334 [50]
DataSet 25	RUN0988 raw reads	(.fastq.gz)	ENA ERR17701317 https://identifiers.org/ena.embl:ERR17701317 [51]
DataSet 26	RUN1005 raw reads	(.fastq.gz)	ENA ERR17701335 https://identifiers.org/ena.embl:ERR17701335 [52]
DataSet 27	RUN1039 raw reads	(.fastq.gz)	ENA ERR17701338 https://identifiers.org/ena.embl:ERR17701338 [53]
DataSet 28	RUN1152 raw reads	(.fastq.gz)	ENA ERR17701332 https://identifiers.org/ena.embl:ERR17701332 [54]
DataSet 29	RUN1170 raw reads	(.fastq.gz)	ENA ERR17701350 https://identifiers.org/ena.embl:ERR17701350 [55]
DataSet 30	RUN1947 raw reads	(.fastq.gz)	ENA ERR17701414 https://identifiers.org/ena.embl:ERR17701414 [56]
DataSet 31	RUN1972 raw reads	(.fastq.gz)	ENA ERR17701345 https://identifiers.org/ena.embl:ERR17701345 [57]

DataSet 32	RUN2130 raw reads	(.fastq.gz)	ENA ERR17701347 https://identifiers.org/ena.embl:ERR17701347 [58]
DataSet 33	RUN2161 raw reads	(.fastq.gz)	ENA ERR17701312 https://identifiers.org/ena.embl:ERR17701312 [59]
DataSet 34	RUN2182 raw reads	(.fastq.gz)	ENA ERR17701336 https://identifiers.org/ena.embl:ERR17701336 [60]
DataSet 35	RUN2221 raw reads	(.fastq.gz)	ENA ERR17701324 https://identifiers.org/ena.embl:ERR17701324 [61]
DataSet 36	RUN2344 raw reads	(.fastq.gz)	ENA ERR17701415 https://identifiers.org/ena.embl:ERR17701415 [62]
DataSet 37	RUN3149 raw reads	(.fastq.gz)	ENA ERR17701323 https://identifiers.org/ena.embl:ERR17701323 [63]
DataSet 38	RUN3304 raw reads	(.fastq.gz)	ENA ERR17701361 https://identifiers.org/ena.embl:ERR17701361 [64]
DataSet 39	RUN3430 raw reads	(.fastq.gz)	ENA ERR17701315 https://identifiers.org/ena.embl:ERR17701315 [65]
DataSet 40	RUN3459 raw reads	(.fastq.gz)	ENA ERR17701349 https://identifiers.org/ena.embl:ERR17701349 [66]
DataSet 41	RUN3510 raw reads	(.fastq.gz)	ENA ERR17701333 https://identifiers.org/ena.embl:ERR17701333 [67]
DataSet 42	RUN3567 raw reads	(.fastq.gz)	ENA ERR17701417 https://identifiers.org/ena.embl:ERR17701417 [68]
DataSet 43	RUN3570 raw reads	(.fastq.gz)	ENA ERR17701314 https://identifiers.org/ena.embl:ERR17701314 [69]
DataSet 44	RUN3618 raw reads	(.fastq.gz)	ENA ERR17701412 https://identifiers.org/ena.embl:ERR17701412 [70]
DataSet 45	RUN3669 raw reads	(.fastq.gz)	ENA ERR17701330 https://identifiers.org/ena.embl:ERR17701330 [71]
DataSet 46	RUN3767 raw reads	(.fastq.gz)	ENA ERR17701329 https://identifiers.org/ena.embl:ERR17701329 [72]
DataSet 47	RUN4268 raw reads	(.fastq.gz)	ENA ERR17701313 https://identifiers.org/ena.embl:ERR17701313 [73]
DataSet 48	RUN4593 raw reads	(.fastq.gz)	ENA ERR17701413 https://identifiers.org/ena.embl:ERR17701413 [74]
DataSet 49	RUN5935 raw reads	(.fastq.gz)	ENA ERR17701346 https://identifiers.org/ena.embl:ERR17701346 [75]

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DataSet 106	RUN4268 genome assembly	(.fasta)	NCBI GCA_987488825.1 https://identifiers.org/ncbi/insdc.gca:GCA_987488825.1 [132]
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DataSet 109	RUN5957 genome assembly	(.fasta)	NCBI GCA_987489365.1 https://identifiers.org/ncbi/insdc.gca:GCA_987489365.1 [135]
DataSet 110	RUN6275 genome assembly	(.fasta)	NCBI GCA_987488995.1 https://identifiers.org/ncbi/insdc.gca:GCA_987488995.1 [136]
DataSet 111	RUN6285 genome assembly	(.fasta)	NCBI GCA_987489115.1 https://identifiers.org/ncbi/insdc.gca:GCA_987489115.1 [137]
DataSet 112	RUN6340 genome assembly	(.fasta)	NCBI GCA_987489095.1 https://identifiers.org/ncbi/insdc.gca:GCA_987489095.1 [138]
DataSet 113	RUN6499 genome assembly	(.fasta)	NCBI GCA_987488815.1 https://identifiers.org/ncbi/insdc.gca:GCA_987488815.1 [139]
DataSet 114	RUN6533 genome assembly	(.fasta)	NCBI GCA_987489245.1 https://identifiers.org/ncbi/insdc.gca:GCA_987489245.1 [140]
DataSet 115	RUN6534 genome assembly	(.fasta)	NCBI GCA_987488975.1 https://identifiers.org/ncbi/insdc.gca:GCA_987488975.1 [141]
DataSet 116	RUN6542 genome assembly	(.fasta)	NCBI GCA_987489435.1 https://identifiers.org/ncbi/insdc.gca:GCA_987489435.1 [142]
DataSet 117	RUN6563 genome assembly	(.fasta)	NCBI GCA_987489345.1 https://identifiers.org/ncbi/insdc.gca:GCA_987489345.1 [143]
DataSet 118	RUN6824 genome assembly	(.fasta)	NCBI GCA_987488985.1 https://identifiers.org/ncbi/insdc.gca:GCA_987488985.1 [144]
DataFile 1	Metadata and genome assembly metrics of RSSC strains	MS Excel file (.xlsx)	Figshare, https://doi.org/10.6084/m9.figshare.33198660 [145]
DataFile 2	Geographic distribution of the 59 representative RSSC strains selected for genome sequencing	(.pdf)	Figshare, https://doi.org/10.6084/m9.figshare.33198711 [146]
DataFile 3	Maximum-likelihood phylogeny of RSSC phylotype I strains	(.pdf)	Figshare, https://doi.org/10.6084/m9.figshare.33198744 [147]

DataFile 4	Maximum-likelihood phylogeny of RSSC phylotype IIA strains	(.pdf)	Figshare, https://doi.org/10.6084/m9.figshare.33198762 [148]
DataFile 5	Maximum-likelihood phylogeny of RSSC phylotype IIB strains	(.pdf)	Figshare, https://doi.org/10.6084/m9.figshare.33198768 [149]
DataFile 6	Maximum-likelihood phylogeny of RSSC phylotype III strains	(.pdf)	Figshare, https://doi.org/10.6084/m9.figshare.33198786 [150]
DataFile 7	Distribution of gene families across the RSSC pangenome	(.pdf)	Figshare, https://doi.org/10.6084/m9.figshare.33198807 [151]

Limitations

This study provides a broad overview of genomic diversity within the RSSC, based on genome assemblies generated from short-read Illumina sequencing data only. Although these assemblies are suitable for comparative genomics and pangenome analyses, they may limit the detection of structural variants within the population. In addition, despite efforts to achieve broad representation across phylotypes and geographical origins, some lineages remain underrepresented due to the unequal availability of strains in biological collections, as it is the case for phylotype IV in this study. Therefore, this dataset may not fully capture the global diversity of the RSSC. Nevertheless, it substantially expands the currently available genomic resources and provides valuable insights into the accessory genomic diversity of the RSSC.

Abbreviations

BUSCO: Benchmarking Universal Single-Copy Orthologs

CIRAD: Centre de coopération Internationale en Recherche Agronomique pour le Développement

Egl: Endoglucanase

PVBMT: Peuplements Végétaux et Bioagresseurs en Milieu Tropical

QUAST: QUality ASsessment Tool

RSSC: *Ralstonia solanacearum* species complex

Declarations

Ethics approval and consent to participate

Access to the genetic resources used in this study was carried out in accordance with the applicable requirements of the Nagoya Protocol.

Consent for publication

Not applicable.

Availability of data and materials

All data records and analysis generated in this study are listed in Table 1 and are cited individually in the reference list [27–151]. The sample and sequencing data are freely and openly available in the European Nucleotide Archive (ENA) under project accession number PRJEB123677 (https://identifiers.org/ena.embl:PRJEB123677). The sample accession numbers for each strain are SAMEA123305602, SAMEA123305603, SAMEA123305604, SAMEA123305605, SAMEA123305606, SAMEA123305607, SAMEA123305608, SAMEA123305609, SAMEA123305610, SAMEA123305611, SAMEA123305612, SAMEA123305613, SAMEA123305614, SAMEA123305615, SAMEA123305616, SAMEA123305617, SAMEA123305618, SAMEA123305619, SAMEA123305620, SAMEA123305621, SAMEA123305622, SAMEA123305623, SAMEA123305624, SAMEA123305625, SAMEA123305626, SAMEA123305627, SAMEA123305628, SAMEA123305629, SAMEA123305630, SAMEA123305631, SAMEA123305632, SAMEA123305633, SAMEA123305634, SAMEA123305635, SAMEA123305636, SAMEA123305637, SAMEA123305638, SAMEA123305639, SAMEA123305640, SAMEA123305641, SAMEA123305642, SAMEA123305643, SAMEA123305644, SAMEA123305645, SAMEA123305646, SAMEA123305647, SAMEA123305648, SAMEA123305649, SAMEA123305650, SAMEA123305651, SAMEA123305652, SAMEA123305653, SAMEA123305654, SAMEA123305655, SAMEA123305656, SAMEA123305657, SAMEA123305658, SAMEA123305659 and SAMEA123305660 (https://identifiers.org/biosample:SAMEA123305602,
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https://identifiers.org/biosample:SAMEA123305660). The raw sequencing reads are available under accessions numbers ERR17701311, ERR17701312, ERR17701313, ERR17701314, ERR17701315, ERR17701316, ERR17701317, ERR17701318, ERR17701319, ERR17701320, ERR17701321, ERR17701322, ERR17701323, ERR17701324, ERR17701325, ERR17701326, ERR17701327, ERR17701328, ERR17701329, ERR17701330, ERR17701331, ERR17701332, ERR17701333,

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https://identifiers.org/ncbi/insdc.gca:GCA_987489495.1) [86–144]. The results of genome analysis have been uploaded to the Figshare repository [145–151].

Competing interests

The authors declare no competing interests.

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Authors' contributions

NB, PL, SP, SRM, and YP designed and managed the project and supervised the laboratory experiments. GC, IR, JJC, MG, PL, SJ, SP, SR, SRM, and YP contributed to sampling, strain importation, bacterial isolation, accessioning into the collection, and the maintenance and curation of the "RUN" collection of RSSC strains. ECS, JJC, MVN, and SJ produced the biological materials used for sequencing. QP and YP performed the bioinformatic analyses. ECS, QP, SP and YP designed the draft manuscript. All authors contributed to writing, reviewing, and editing the final manuscript.

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References

1. Hayward AC. Biology and Epidemiology of Bacterial Wilt Caused by *Pseudomonas Solanacearum*. Annual Review of Phytopathology. 1991;29 Volume 29,:65–87. https://doi.org/10.1146/annurev.py.29.090191.000433.

2. Denny T. Plant pathogenic *Ralstonia* species. In: Gnanamanickam SS, editor. Plant-Associated Bacteria. Dordrecht: Springer Netherlands; 2006. p. 573–644. https://doi.org/10.1007/978-1-4020-4538-7_16.

3. Prior P, Ailloud F, Dalsing BL, Remenant B, Sanchez B, Allen C. Genomic and proteomic evidence supporting the division of the plant pathogen *Ralstonia solanacearum* into three species. BMC Genomics. 2016;17:90. https://doi.org/10.1186/s12864-016-2413-z.

4. Cellier G, Gauche MM, Cheron JJ, Pecrix Y. How to Conduct Phylogenetic Endoglucanase (egl) Inference Using the Reference *Ralstonia solanacearum* Species Complex Curated Database. Phytopathology®. 2025;115:548–54. https://doi.org/10.1094/PHYTO-10-24-0318-SC.

5. Steidl OR, Truchon AN, Hayes MM, Allen C. Complete Genome Resources for *Ralstonia* Bacterial Wilt Strains UW763 (Phylotype I); Rs5 and UW700 (Phylotype II); and UW386, RUN2474, and RUN2279 (Phylotype III). MPMI. 2021;34:1212–5. https://doi.org/10.1094/MPMI-04-21-0086-A.

6. Ailloud F, Lowe T, Cellier G, Roche D, Allen C, Prior P. Comparative genomic analysis of *Ralstonia solanacearum* reveals candidate genes for host specificity. BMC Genomics. 2015;16:270. https://doi.org/10.1186/s12864-015-1474-8.

7. Remenant B, Coupat-Goutaland B, Guidot A, Cellier G, Wicker E, Allen C, et al. Genomes of three tomato pathogens within the *Ralstonia solanacearum* species complex reveal significant evolutionary divergence. BMC Genomics. 2010;11:379. https://doi.org/10.1186/1471-2164-11-379.

8. Nomenjanahary MV, Rasoamanana H, Javegny S, Rieux A, Ravelomanantsoa S, Poussier S, et al. High-Quality Genome Resource of Eight Strains of *Ralstonia pseudosolanacearum* Causing Bacterial Wilt in Madagascar. PhytoFrontiers™. 2025;5:94–9. https://doi.org/10.1094/PHYTOFR-10-24-0110-A.

9. Bocsanczy AM, Huguet-Tapia JC, Norman DJ. Comparative Genomics of *Ralstonia solanacearum* Identifies Candidate Genes Associated with Cool Virulence. Front Plant Sci. 2017;8. https://doi.org/10.3389/fpls.2017.01565.

10. Sharma P, Johnson MA, Mazloom R, Allen C, Heath LS, Lowe-Power TM, et al. Meta-analysis of the *Ralstonia solanacearum* species complex (RSSC) based on comparative evolutionary genomics and reverse ecology. Microbial Genomics. 2022;8. https://doi.org/10.1099/mgen.0.000791.

11. Caly-Simbou E, Nomenjanahary MV, Javegny S, Boyer C, Chéron J-J, Ramin-Mangata S, et al. First genomic analysis of a strain of *Ralstonia pseudosolanacearum* isolated from Mayotte island. BMC Genom Data. 2026;27:10. https://doi.org/10.1186/s12863-025-01395-2.

12. Kamanda VDPM, Nomenjanahary M-V, Rasoamanana H, Ramin-Mangata S, Javegny S, Chéron J-J, et al. Characterization of *Ralstonia pseudosolanacearum* phylotype I isolates causing bacterial wilt in Democratic Republic of Congo. Plant Disease. 2026. https://doi.org/10.1094/PDIS-07-25-1573-SC.

13. Evseeva D, Pecrix Y, Kucka M, Weiler C, Franzl C, Vlková-Žlebková M, et al. Interspecies exchange of mobile genetic elements during a plant disease outbreak. Genome Biol Evol. 2026;:evag192. https://doi.org/10.1093/gbe/evag192.

14. Chen S, Zhou Y, Chen Y, Gu J. fastp: an ultra-fast all-in-one FASTQ preprocessor. Bioinformatics. 2018;34:i884–90. https://doi.org/10.1093/bioinformatics/bty560.

15. Tegenfeldt F, Kuznetsov D, Manni M, Berkeley M, Zdobnov EM, Kriventseva EV. OrthoDB and BUSCO update: annotation of orthologs with wider sampling of genomes. Nucleic Acids Research. 2025;53:D516–22. https://doi.org/10.1093/nar/gkae987.

16. Parks DH, Imelfort M, Skennerton CT, Hugenholtz P, Tyson GW. CheckM: assessing the quality of microbial genomes recovered from isolates, single cells, and metagenomes. Genome Res. 2015;25:1043–55. https://doi.org/10.1101/gr.186072.114.

17. Gurevich A, Saveliev V, Vyahhi N, Tesler G. QUAST: quality assessment tool for genome assemblies. Bioinformatics. 2013;29:1072–5. https://doi.org/10.1093/bioinformatics/btt086.

18. Katz L, Griswold T, Morrison S, Caravas J, Zhang S, Bakker H, et al. Mashtree: a rapid comparison of whole genome sequence files. JOSS. 2019;4:1762. https://doi.org/10.21105/joss.01762.

19. Kille B, Nute MG, Huang V, Kim E, Phillippy AM, Treangen TJ. Parsnp 2.0: scalable core-genome alignment for massive microbial datasets. Bioinformatics. 2024;40:btae311. https://doi.org/10.1093/bioinformatics/btae311.

20. Croucher NJ, Page AJ, Connor TR, Delaney AJ, Keane JA, Bentley SD, et al. Rapid phylogenetic analysis of large samples of recombinant bacterial whole genome sequences using Gubbins. Nucleic Acids Research. 2015;43:e15–e15. https://doi.org/10.1093/nar/gku1196.

21. Wong TKF, Ly-Trong N, Ren H, Demotte P, Baños H, Roger AJ, et al. IQ-TREE 3: Phylogenomic Inference Software using Complex Evolutionary Models. Molecular Biology and Evolution. 2026;:msag117. https://doi.org/10.1093/molbev/msag117.

22. Kalyaanamoorthy S, Minh BQ, Wong TKF, Von Haeseler A, Jermiin LS. ModelFinder: fast model selection for accurate phylogenetic estimates. Nat Methods. 2017;14:587–9. https://doi.org/10.1038/nmeth.4285.

23. Hoang DT, Chernomor O, Von Haeseler A, Minh BQ, Vinh LS. UFBoot2: Improving the Ultrafast Bootstrap Approximation. Molecular Biology and Evolution. 2018;35:518–22. https://doi.org/10.1093/molbev/msx281.

24. Sharma P, Johnson MA, Mazloom R, Allen C, Heath LS, Lowe-Power TM, et al. Meta-analysis of the Ralstonia solanacearum species complex (RSSC) based on comparative evolutionary genomics and reverse ecology. Microbial Genomics. 2022;8. https://doi.org/10.1099/mgen.0.000791.

25. Schwengers O, Jelonek L, Dieckmann MA, Beyvers S, Blom J, Goesmann A. Bakta: rapid and standardized annotation of bacterial genomes via alignment-free sequence identification: Find out more about Bakta, the motivation, challenges and applications, here. Microbial Genomics. 2021;7. https://doi.org/10.1099/mgen.0.000685.

26. Bayliss SC, Thorpe HA, Coyle NM, Sheppard SK, Feil EJ. PIRATE: A fast and scalable pangenomics toolbox for clustering diverged orthologues in bacteria. GigaScience. 2019;8:giz119. https://doi.org/10.1093/gigascience/giz119.

27. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 1. 2026. RUN0009 raw reads. Available from: https://identifiers.org/ena.embl:ERR17701360.

28. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 2. 2026. RUN0033 raw reads. Available from: https://identifiers.org/ena.embl:ERR17701348.

29. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 3. 2026. RUN0038 raw reads. Available from: https://identifiers.org/ena.embl:ERR17701320.

30. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 4. 2026. RUN0044 raw reads. Available from: https://identifiers.org/ena.embl:ERR17701356.

31. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 5. 2026. RUN0085 raw reads. Available from: https://identifiers.org/ena.embl:ERR17701362.

32. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 6. 2026. RUN0090 raw reads. Available from: https://identifiers.org/ena.embl:ERR17701351.

33. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 7. 2026. RUN0102 raw reads. Available from: https://identifiers.org/ena.embl:ERR17701341.

34. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 8. 2026. RUN0309 raw reads. Available from: https://identifiers.org/ena.embl:ERR17701344.

35. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 9. 2026. RUN0312 raw reads. Available from: https://identifiers.org/ena.embl:ERR17701340.

36. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 10. 2026. RUN0323 raw reads. Available from: https://identifiers.org/ena.embl:ERR17701327.

37. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 11. 2026. RUN0339 raw reads. Available from: https://identifiers.org/ena.embl:ERR17701328.

38. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 12. 2026. RUN0340 raw reads. Available from: https://identifiers.org/ena.embl:ERR17701355.

39. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 13. 2026. RUN0345 raw reads. Available from: https://identifiers.org/ena.embl:ERR17701359.

40. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 14. 2026. RUN0346 raw reads. Available from: https://identifiers.org/ena.embl:ERR17701358.

41. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 15. 2026. RUN0359 raw reads. Available from: https://identifiers.org/ena.embl:ERR17701353.

42. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 16. 2026. RUN0434 raw reads. Available from: https://identifiers.org/ena.embl:ERR17701343.

43. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 17. 2026. RUN0551 raw reads. Available from: https://identifiers.org/ena.embl:ERR17701352.

44. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 18. 2026. RUN0556 raw reads. Available from: https://identifiers.org/ena.embl:ERR17701322.

45. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 19. 2026. RUN0624 raw reads. Available from: https://identifiers.org/ena.embl:ERR17701318.

46. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 20. 2026. RUN0625 raw reads. Available from: https://identifiers.org/ena.embl:ERR17701326.

47. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 21. 2026. RUN0652 raw reads. Available from: https://identifiers.org/ena.embl:ERR17701321.

48. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 22. 2026. RUN0671 raw reads. Available from: https://identifiers.org/ena.embl:ERR17701411.

49. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 23. 2026. RUN0676 raw reads. Available from: https://identifiers.org/ena.embl:ERR17701316.

50. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 24. 2026. RUN0677 raw reads. Available from: https://identifiers.org/ena.embl:ERR17701334.

51. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 25. 2026. RUN0988 raw reads. Available from: https://identifiers.org/ena.embl:ERR17701317.

52. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 26. 2026. RUN1005 raw reads. Available from: https://identifiers.org/ena.embl:ERR17701335.

53. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 27. 2026. RUN1039 raw reads. Available from: https://identifiers.org/ena.embl:ERR17701338.

54. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 28. 2026. RUN1152 raw reads. Available from: https://identifiers.org/ena.embl:ERR17701332.

55. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 29. 2026. RUN1170 raw reads. Available from: https://identifiers.org/ena.embl:ERR17701350.

56. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 30. 2026. RUN1947 raw reads. Available from: https://identifiers.org/ena.embl:ERR17701414.

57. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 31. 2026. RUN1972 raw reads. Available from: https://identifiers.org/ena.embl:ERR17701345.

58. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 32. 2026. RUN2130 raw reads. Available from: https://identifiers.org/ena.embl:ERR17701347.

59. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 33. 2026. RUN2161 raw reads. Available from: https://identifiers.org/ena.embl:ERR17701312.

60. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 34. 2026. RUN2182 raw reads. Available from: https://identifiers.org/ena.embl:ERR17701336.

61. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 35. 2026. RUN2221 raw reads. Available from: https://identifiers.org/ena.embl:ERR17701324.

62. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 36. 2026. RUN2344 raw reads. Available from: https://identifiers.org/ena.embl:ERR17701415.

63. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 37. 2026. RUN3149 raw reads. Available from: https://identifiers.org/ena.embl:ERR17701323.

64. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 38. 2026. RUN3304 raw reads. Available from: https://identifiers.org/ena.embl:ERR17701361.

65. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 39. 2026. RUN3430 raw reads. Available from: https://identifiers.org/ena.embl:ERR17701315.

66. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 40. 2026. RUN3459 raw reads. Available from: https://identifiers.org/ena.embl:ERR17701349.

67. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 41. 2026. RUN3510 raw reads. Available from: https://identifiers.org/ena.embl:ERR17701333.

68. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 42. 2026. RUN3567 raw reads. Available from: https://identifiers.org/ena.embl:ERR17701417.

69. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 43. 2026. RUN3570 raw reads. Available from: https://identifiers.org/ena.embl:ERR17701314.

70. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 44. 2026. RUN3618 raw reads. Available from: https://identifiers.org/ena.embl:ERR17701412.

71. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 45. 2026. RUN3669 raw reads. Available from: https://identifiers.org/ena.embl:ERR17701330.

72. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 46. 2026. RUN3767 raw reads. Available from: https://identifiers.org/ena.embl:ERR17701329.

73. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 47. 2026. RUN4268 raw reads. Available from: https://identifiers.org/ena.embl:ERR17701313.

74. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 48. 2026. RUN4593 raw reads. Available from: https://identifiers.org/ena.embl:ERR17701413.

75. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 49. 2026. RUN5935 raw reads. Available from: https://identifiers.org/ena.embl:ERR17701346.

76. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 50. 2026. RUN5957 raw reads. Available from: https://identifiers.org/ena.embl:ERR17701337.

77. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 51. 2026. RUN6275 raw reads. Available from: https://identifiers.org/ena.embl:ERR17701325.

78. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 52. 2026. RUN6285 raw reads. Available from: https://identifiers.org/ena.embl:ERR17701311.

79. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 53. 2026. RUN6340 raw reads. Available from: https://identifiers.org/ena.embl:ERR17701354.

80. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 54. 2026. RUN6499 raw reads. Available from: https://identifiers.org/ena.embl:ERR17701339.

81. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 55. 2026. RUN6533 raw reads. Available from: https://identifiers.org/ena.embl:ERR17701319.

82. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 56. 2026. RUN6534 raw reads. Available from: https://identifiers.org/ena.embl:ERR17701331.

83. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 57. 2026. RUN6542 raw reads. Available from: https://identifiers.org/ena.embl:ERR17701357.

84. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 58. 2026. RUN6563 raw reads. Available from: https://identifiers.org/ena.embl:ERR17701342.

85. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 59. 2026. RUN6824 raw reads. Available from: https://identifiers.org/ena.embl:ERR17701416.

86. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 60. 2026. RUN0009 genome assembly. Available from: https://identifiers.org/ncbi/insdc.gca:GCA_987489085.1.

87. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 61. 2026. RUN0033 genome assembly. Available from: https://identifiers.org/ncbi/insdc.gca:GCA_987489415.1.

88. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 62. 2026. RUN0038 genome assembly. Available from: https://identifiers.org/ncbi/insdc.gca:GCA_987489155.1.

89. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 63. 2026. RUN0044 genome assembly. Available from: https://identifiers.org/ncbi/insdc.gca:GCA_987489265.1.

90. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 64. 2026. RUN0085 genome assembly. Available from: https://identifiers.org/ncbi/insdc.gca:GCA_987489475.1.

91. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 65. 2026. RUN0090 genome assembly. Available from: https://identifiers.org/ncbi/insdc.gca:GCA_987489185.1.

92. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 66. 2026. RUN0102 genome assembly. Available from: https://identifiers.org/ncbi/insdc.gca:GCA_987489495.1.

93. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 67. 2026. RUN0309 genome assembly. Available from: https://identifiers.org/ncbi/insdc.gca:GCA_987489445.1.

94. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 68. 2026. RUN0312 genome assembly. Available from: https://identifiers.org/ncbi/insdc.gca:GCA_987489285.1.

95. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 69. 2026. RUN0323 genome assembly. Available from: https://identifiers.org/ncbi/insdc.gca:GCA_987489025.1.

96. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 70. 2026. RUN0339 genome assembly. Available from: https://identifiers.org/ncbi/insdc.gca:GCA_987489485.1.

97. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 71. 2026. RUN0340 genome assembly. Available from: https://identifiers.org/ncbi/insdc.gca:GCA_987489135.1.

98. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 72. 2026. RUN0345 genome assembly. Available from: https://identifiers.org/ncbi/insdc.gca:GCA_987489455.1.

99. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 73. 2026. RUN0346 genome assembly. Available from: https://identifiers.org/ncbi/insdc.gca:GCA_987489175.1.

100. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 74. 2026. RUN0359 genome assembly. Available from: https://identifiers.org/ncbi/insdc.gca:GCA_987488965.1.

101. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 75.

2026. RUN0434 genome assembly. Available from: https://identifiers.org/ncbi/insdc.gca:GCA_987489205.1.

102. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 76. 2026. RUN0551 genome assembly. Available from: https://identifiers.org/ncbi/insdc.gca:GCA_987489465.1.

103. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 77. 2026. RUN0556 genome assembly. Available from: https://identifiers.org/ncbi/insdc.gca:GCA_987489425.1.

104. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 78. 2026. RUN0624 genome assembly. Available from: https://identifiers.org/ncbi/insdc.gca:GCA_987489355.1.

105. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 79. 2026. RUN0625 genome assembly. Available from: https://identifiers.org/ncbi/insdc.gca:GCA_987489105.1.

106. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 80. 2026. RUN0652 genome assembly. Available from: https://identifiers.org/ncbi/insdc.gca:GCA_987488925.1.

107. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 81. 2026. RUN0671 genome assembly. Available from: https://identifiers.org/ncbi/insdc.gca:GCA_987489275.1.

108. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 82. 2026. RUN0676 genome assembly. Available from: https://identifiers.org/ncbi/insdc.gca:GCA_987489295.1.

109. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 83. 2026. RUN0677 genome assembly. Available from: https://identifiers.org/ncbi/insdc.gca:GCA_987489395.1.

110. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 84. 2026. RUN0988 genome assembly. Available from: https://identifiers.org/ncbi/insdc.gca:GCA_987489145.1.

111. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 85. 2026. RUN1005 genome assembly. Available from: https://identifiers.org/ncbi/insdc.gca:GCA_987488885.1.

112. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 86. 2026. RUN1039 genome assembly. Available from: https://identifiers.org/ncbi/insdc.gca:GCA_987488865.1.

113. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 87. 2026. RUN1152 genome assembly. Available from: https://identifiers.org/ncbi/insdc.gca:GCA_987489255.1.

114. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 88. 2026. RUN1170 genome assembly. Available from: https://identifiers.org/ncbi/insdc.gca:GCA_987489405.1.

115. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 89. 2026. RUN1947 genome assembly. Available from: https://identifiers.org/ncbi/insdc.gca:GCA_987489165.1.

116. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 90. 2026. RUN1972 genome assembly. Available from: https://identifiers.org/ncbi/insdc.gca:GCA_987489065.1.

117. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 91. 2026. RUN2130 genome assembly. Available from: https://identifiers.org/ncbi/insdc.gca:GCA_987489375.1.

118. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 92. 2026. RUN2161 genome assembly. Available from: https://identifiers.org/ncbi/insdc.gca:GCA_987489335.1.

119. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 93. 2026. RUN2182 genome assembly. Available from: https://identifiers.org/ncbi/insdc.gca:GCA_987489325.1.

120. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 94. 2026. RUN2221 genome assembly. Available from: https://identifiers.org/ncbi/insdc.gca:GCA_987489035.1.

121. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 95. 2026. RUN2344 genome assembly. Available from: https://identifiers.org/ncbi/insdc.gca:GCA_987489305.1.

122. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 96.

2026. RUN3149 genome assembly. Available from: https://identifiers.org/ncbi/insdc.gca:GCA_987488955.1.

123. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 97. 2026. RUN3304 genome assembly. Available from: https://identifiers.org/ncbi/insdc.gca:GCA_987489055.1.

124. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 98. 2026. RUN3430 genome assembly. Available from: https://identifiers.org/ncbi/insdc.gca:GCA_987489125.1.

125. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 99. 2026. RUN3459 genome assembly. Available from: https://identifiers.org/ncbi/insdc.gca:GCA_987489225.1.

126. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 100. 2026. RUN3510 genome assembly. Available from: https://identifiers.org/ncbi/insdc.gca:GCA_987489215.1.

127. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 101. 2026. RUN3567 genome assembly. Available from: https://identifiers.org/ncbi/insdc.gca:GCA_987489315.1.

128. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 102. 2026. RUN3570 genome assembly. Available from: https://identifiers.org/ncbi/insdc.gca:GCA_987488895.1.

129. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 103. 2026. RUN3618 genome assembly. Available from: https://identifiers.org/ncbi/insdc.gca:GCA_987488845.1.

130. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 104. 2026. RUN3669 genome assembly. Available from: https://identifiers.org/ncbi/insdc.gca:GCA_987489235.1.

131. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 105. 2026. RUN3767 genome assembly. Available from: https://identifiers.org/ncbi/insdc.gca:GCA_987489075.1.

132. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 106. 2026. RUN4268 genome assembly. Available from: https://identifiers.org/ncbi/insdc.gca:GCA_987488825.1.

133. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 107. 2026. RUN4593 genome assembly. Available from: https://identifiers.org/ncbi/insdc.gca:GCA_987489195.1.

134. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 108. 2026. RUN5935 genome assembly. Available from: https://identifiers.org/ncbi/insdc.gca:GCA_987489385.1.

135. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 109. 2026. RUN5957 genome assembly. Available from: https://identifiers.org/ncbi/insdc.gca:GCA_987489365.1.

136. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 110. 2026. RUN6275 genome assembly. Available from: https://identifiers.org/ncbi/insdc.gca:GCA_987488995.1.

137. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 111. 2026. RUN6285 genome assembly. Available from: https://identifiers.org/ncbi/insdc.gca:GCA_987489115.1.

138. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 112. 2026. RUN6340 genome assembly. Available from: https://identifiers.org/ncbi/insdc.gca:GCA_987489095.1.

139. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 113. 2026. RUN6499 genome assembly. Available from: https://identifiers.org/ncbi/insdc.gca:GCA_987488815.1.

140. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 114. 2026. RUN6533 genome assembly. Available from: https://identifiers.org/ncbi/insdc.gca:GCA_987489245.1.

141. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 115. 2026. RUN6534 genome assembly. Available from: https://identifiers.org/ncbi/insdc.gca:GCA_987488975.1.

142. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 116. 2026. RUN6542 genome assembly. Available from: https://identifiers.org/ncbi/insdc.gca:GCA_987489435.1.

143. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 117.

2026. RUN6563 genome assembly. Available from: https://identifiers.org/ncbi/insdc.gca:GCA_987489345.1.

144. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataSet 118. 2026. RUN6824 genome assembly. Available from: https://identifiers.org/ncbi/insdc.gca:GCA_987488985.1.

145. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataFile 1. 2026. Figshare. Metadata and genome assembly metrics of RSSC strains. Available from: https://doi.org/10.6084/m9.figshare.33198660.

146. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataFile 2. 2026. Figshare. Geographic distribution of the 59 representative RSSC strains selected for genome sequencing. Available from: https://doi.org/10.6084/m9.figshare.33198711.

147. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataFile 3. 2026. Figshare. Maximum-likelihood phylogeny of RSSC phylotype I strains. Available from: https://doi.org/10.6084/m9.figshare.33198744.

148. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataFile 4. 2026. Figshare. Maximum-likelihood phylogeny of RSSC phylotype IIA strains. Available from: https://doi.org/10.6084/m9.figshare.33198762.

149. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataFile 5. 2026. Figshare. Maximum-likelihood phylogeny of RSSC phylotype IIB strains. Available from: https://doi.org/10.6084/m9.figshare.33198768.

150. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataFile 6. 2026. Figshare. Maximum-likelihood phylogeny of RSSC phylotype III strains. Available from: https://doi.org/10.6084/m9.figshare.33198786.

151. Caly-Simbou E, Piet Q, Nomenjanahary MV, Javegny S, Chéron JJ, Gauche M, Becker N, Ravelomanantsoa S, Robène I, Laurent P, Ramin-Mangata S, Cellier G, Poussier S, Pecrix Y. DataFile 7. 2026. Figshare. Distribution of gene families across the RSSC pangenome. Available from: https://doi.org/10.6084/m9.figshare.33198807.