

Part 5: Pathogen Detection (RG3/4 Species) – Neg_Control_W

Pathogen detection analysis for sample Neg_Control_W:

Filtering criteria:

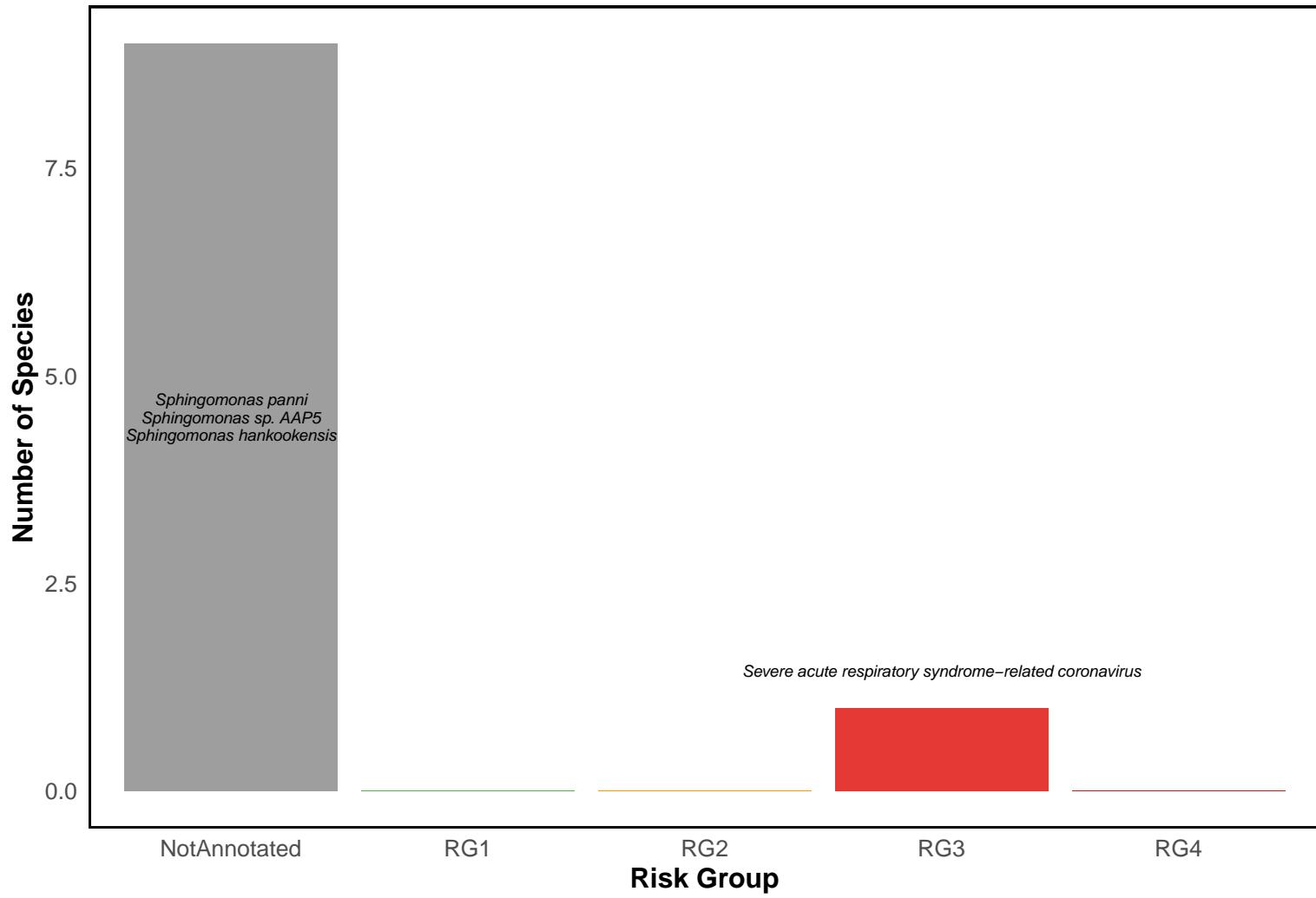
- Include: RG3, RG4 risk groups
- Exclude: RG1, RG2 risk groups
- Exclude: Species annotated as 'Microbiome' in HOMD.Category

Key findings:

- Total species in sample: 27
- Potential pathogenic species identified: 10
- Most abundant pathogen: Sphingomonas panni
- Average pathogen reads: 2734.7

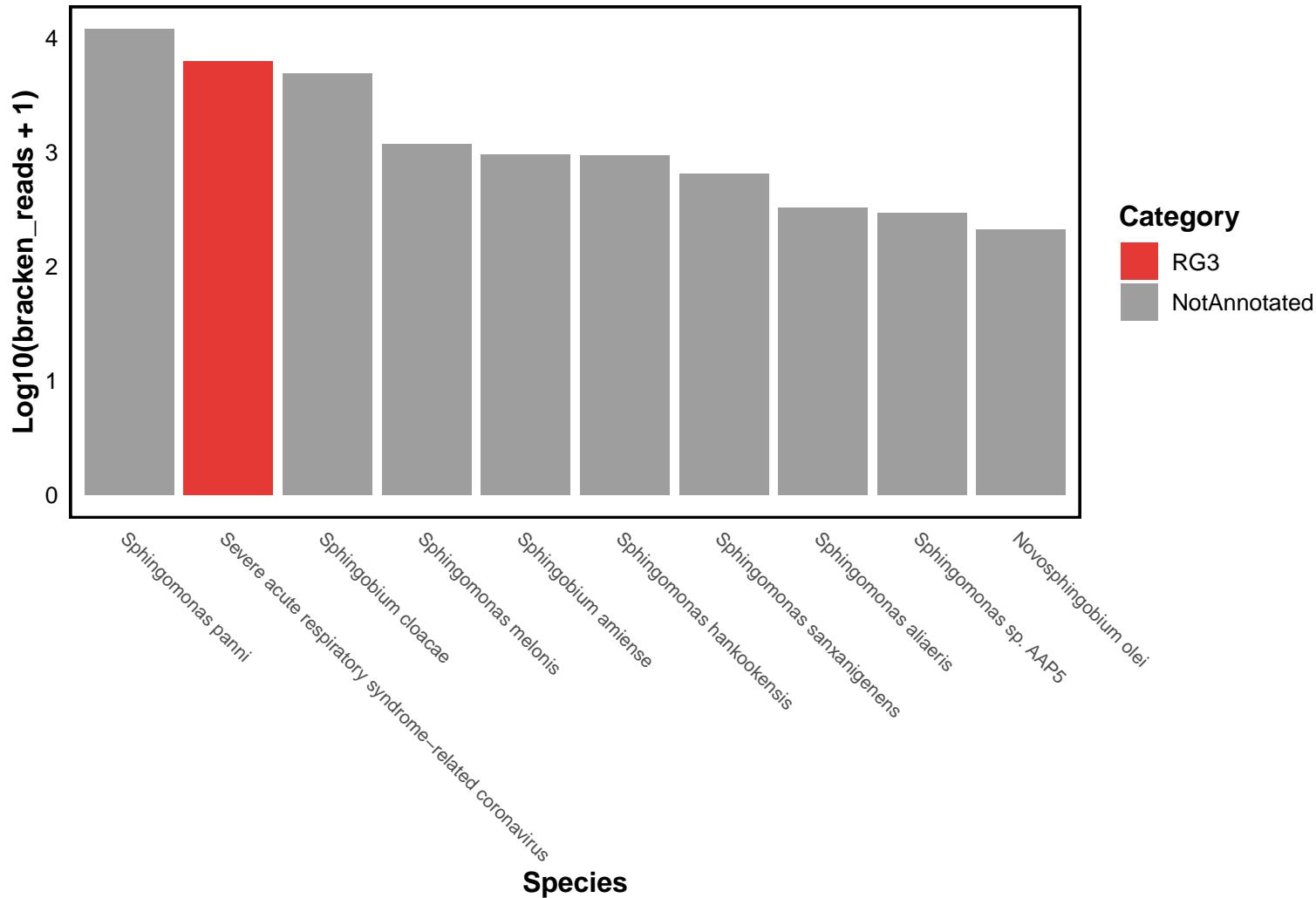
Species per Risk Group – Neg_Control_W – Pathogens

Total species: 10



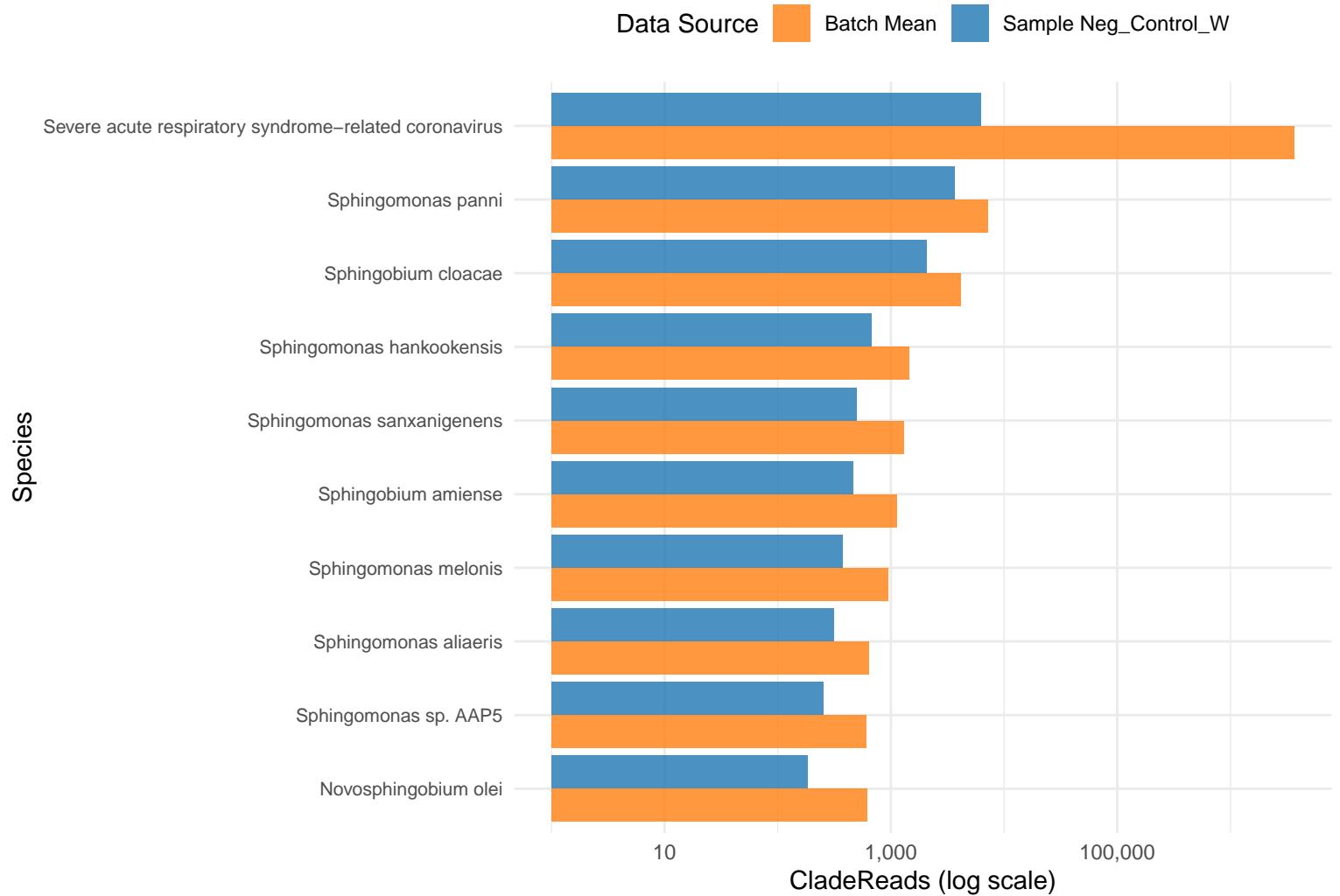
Species by Risk Group – Neg_Control_W – Pathogens

Top 10 species by Log10(bracken_reads + 1)



Pathogen Detection: Sample vs Batch Comparison

Sample: Neg_Control_W | Top 15 pathogenic species by sample cladeReads



Part 5: Pathogen Detection (RG3/4 Species) – W61303224

Pathogen detection analysis for sample W61303224:

Filtering criteria:

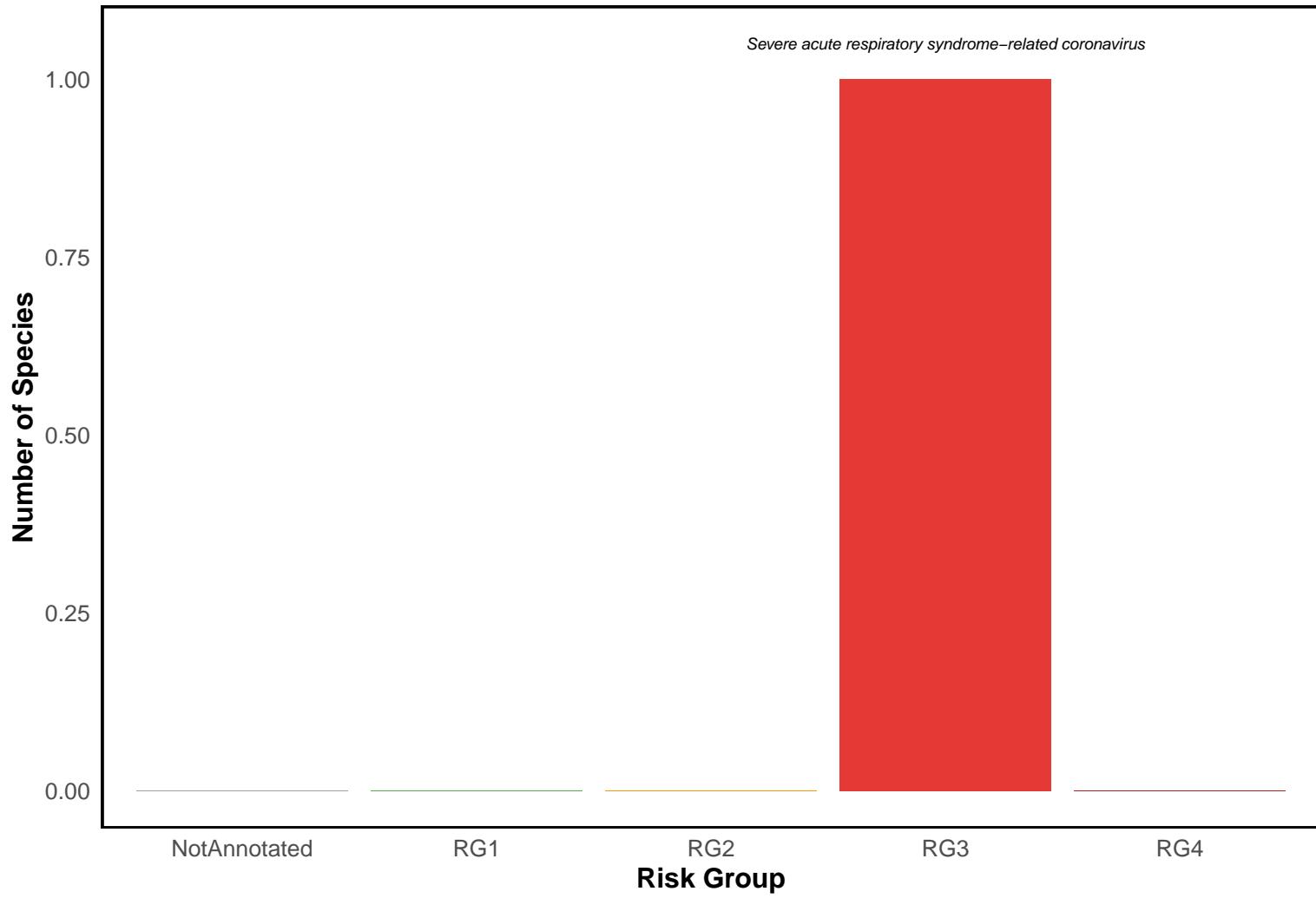
- Include: RG3, RG4 risk groups
- Exclude: RG1, RG2 risk groups
- Exclude: Species annotated as 'Microbiome' in HOMD.Category

Key findings:

- Total species in sample: 12
- Potential pathogenic species identified: 1
- Most abundant pathogen: Severe acute respiratory syndrome-related coronavirus
- Average pathogen reads: 2012

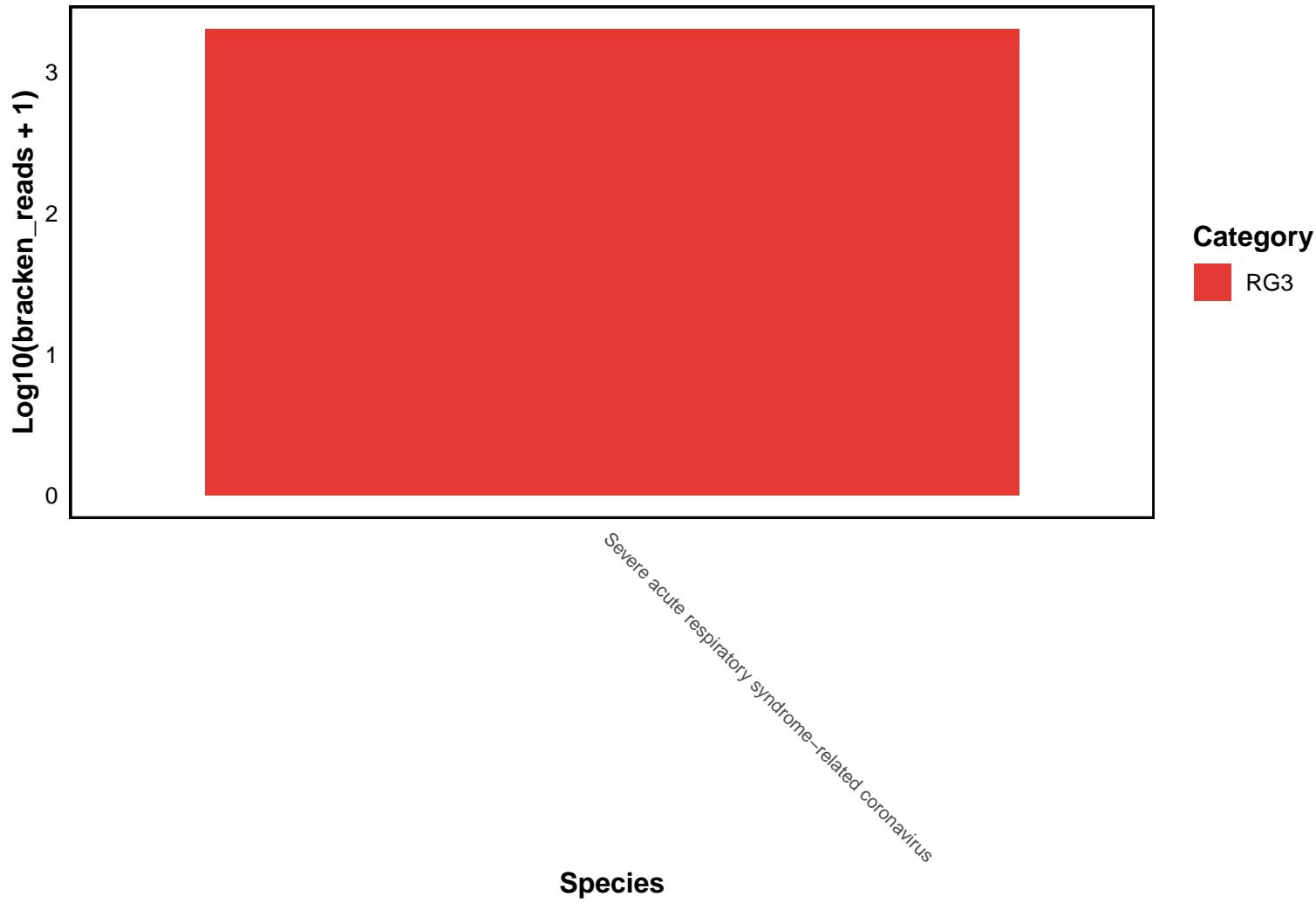
Species per Risk Group – W61303224 – Pathogens

Total species: 1



Species by Risk Group – W61303224 – Pathogens

Top 1 species by Log10(bracken_reads + 1)



Pathogen Detection: Sample vs Batch Comparison

Sample: W61303224 | Top 15 pathogenic species by sample cladeReads

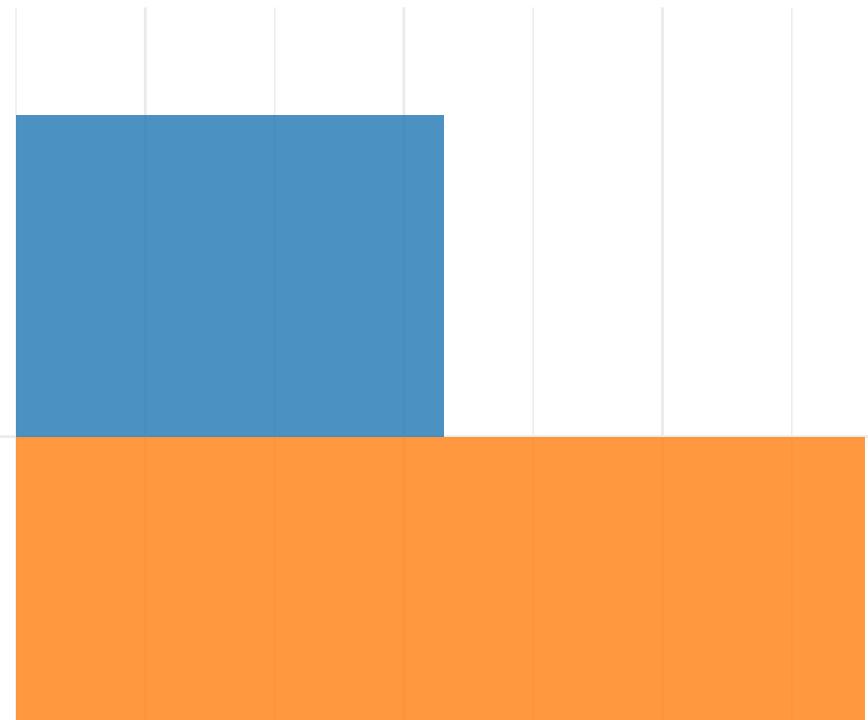
Data Source

Batch Mean

Sample W61303224

Species

Severe acute respiratory syndrome–related coronavirus



10

1,000

100,000

CladeReads (log scale)

Part 5: Pathogen Detection (RG3/4 Species) – W61304616

Pathogen detection analysis for sample W61304616:

Filtering criteria:

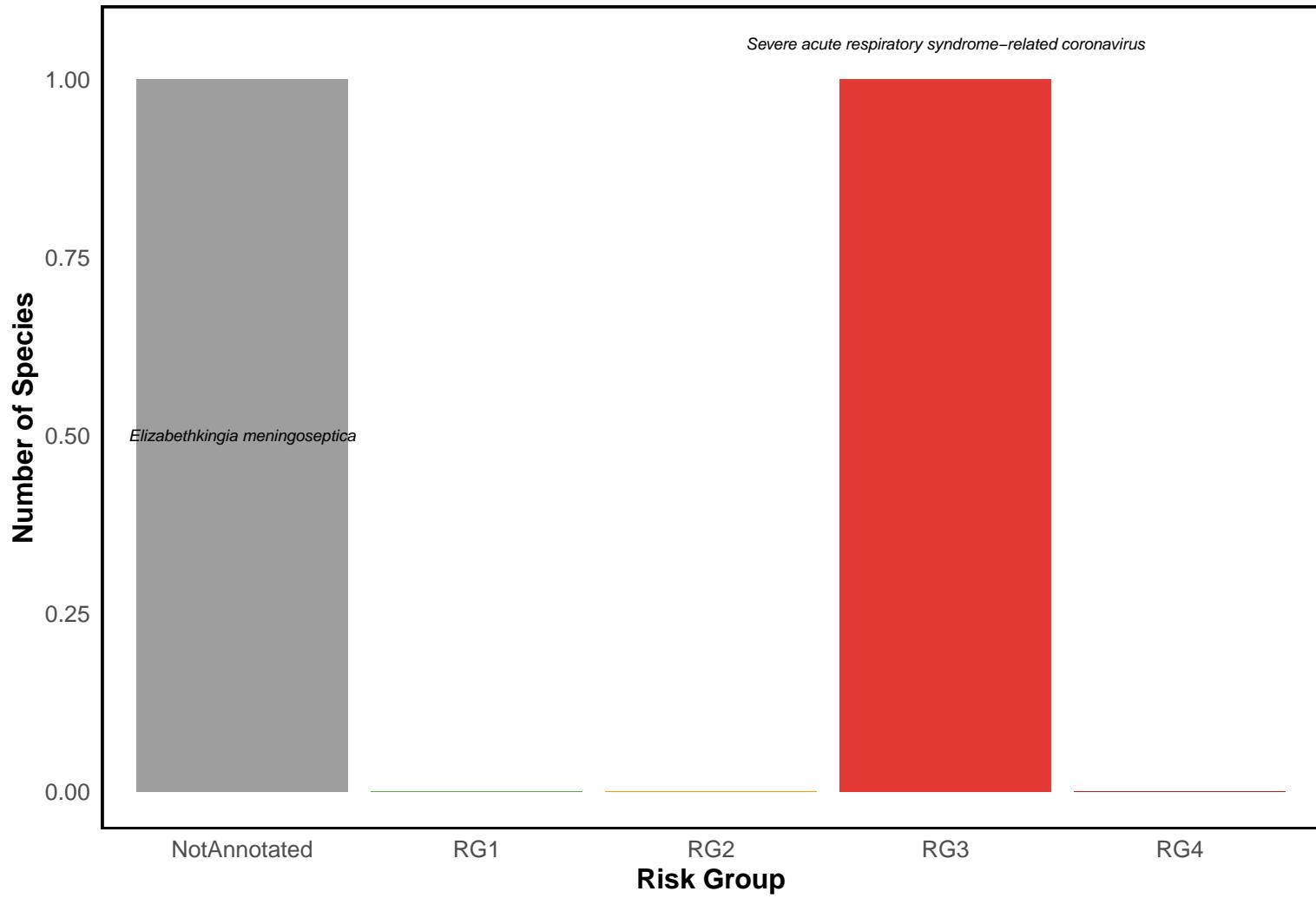
- Include: RG3, RG4 risk groups
- Exclude: RG1, RG2 risk groups
- Exclude: Species annotated as 'Microbiome' in HOMD.Category

Key findings:

- Total species in sample: 26
- Potential pathogenic species identified: 2
- Most abundant pathogen: Severe acute respiratory syndrome-related coronavirus
- Average pathogen reads: 2429167.5

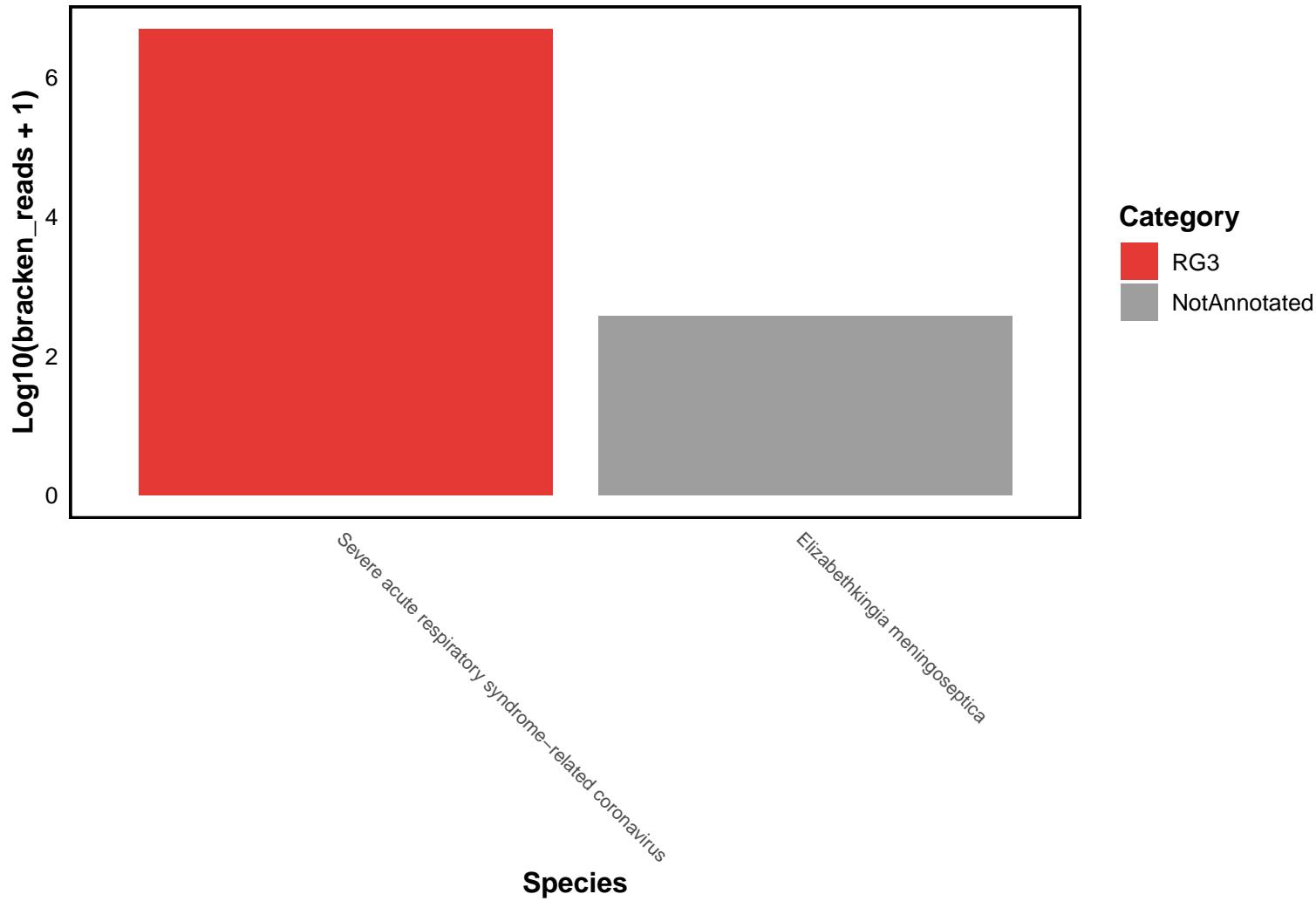
Species per Risk Group – W61304616 – Pathogens

Total species: 2



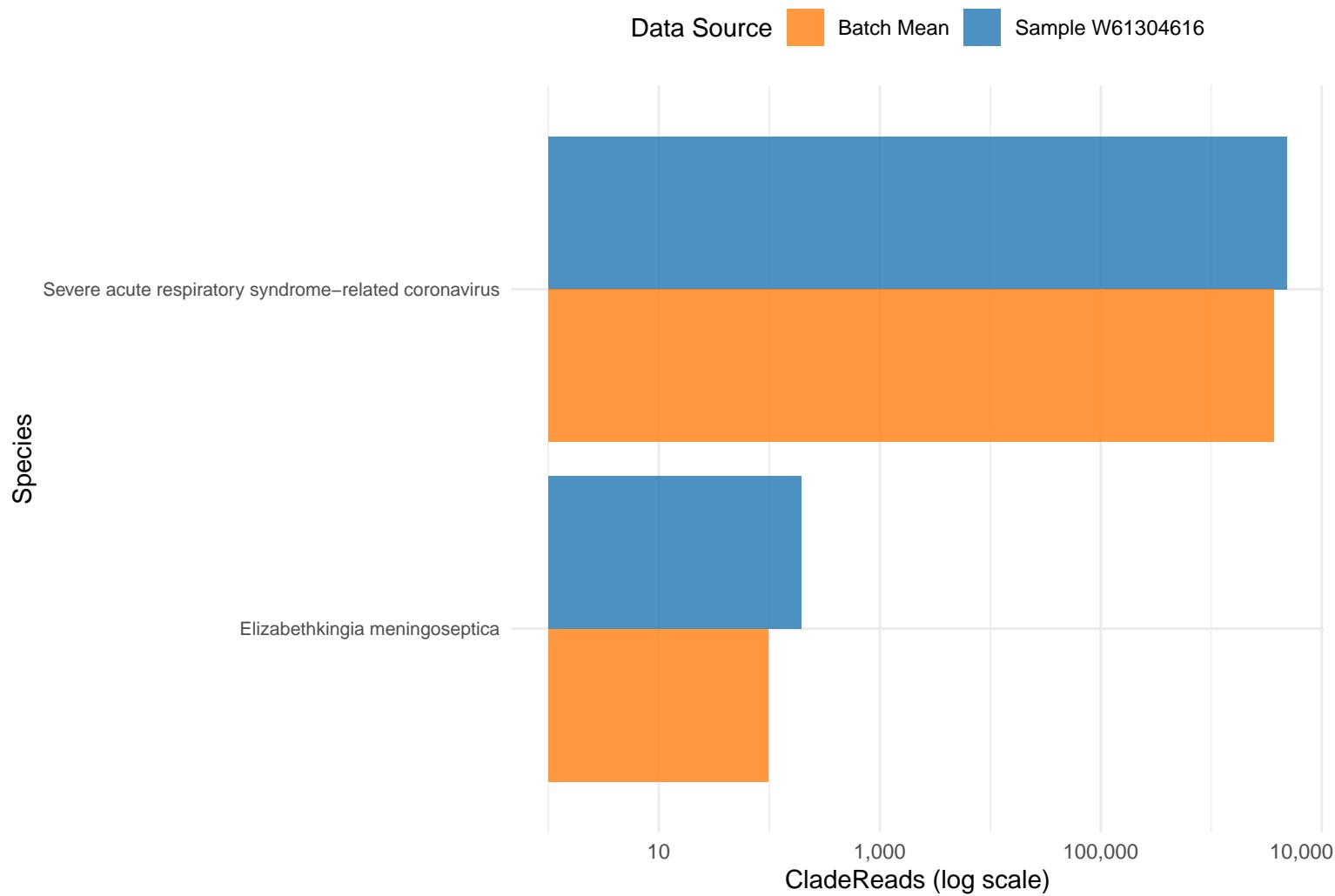
Species by Risk Group – W61304616 – Pathogens

Top 2 species by Log10(bracken_reads + 1)



Pathogen Detection: Sample vs Batch Comparison

Sample: W61304616 | Top 15 pathogenic species by sample cladeReads



Part 5: Pathogen Detection (RG3/4 Species) – W61402281

Pathogen detection analysis for sample W61402281:

Filtering criteria:

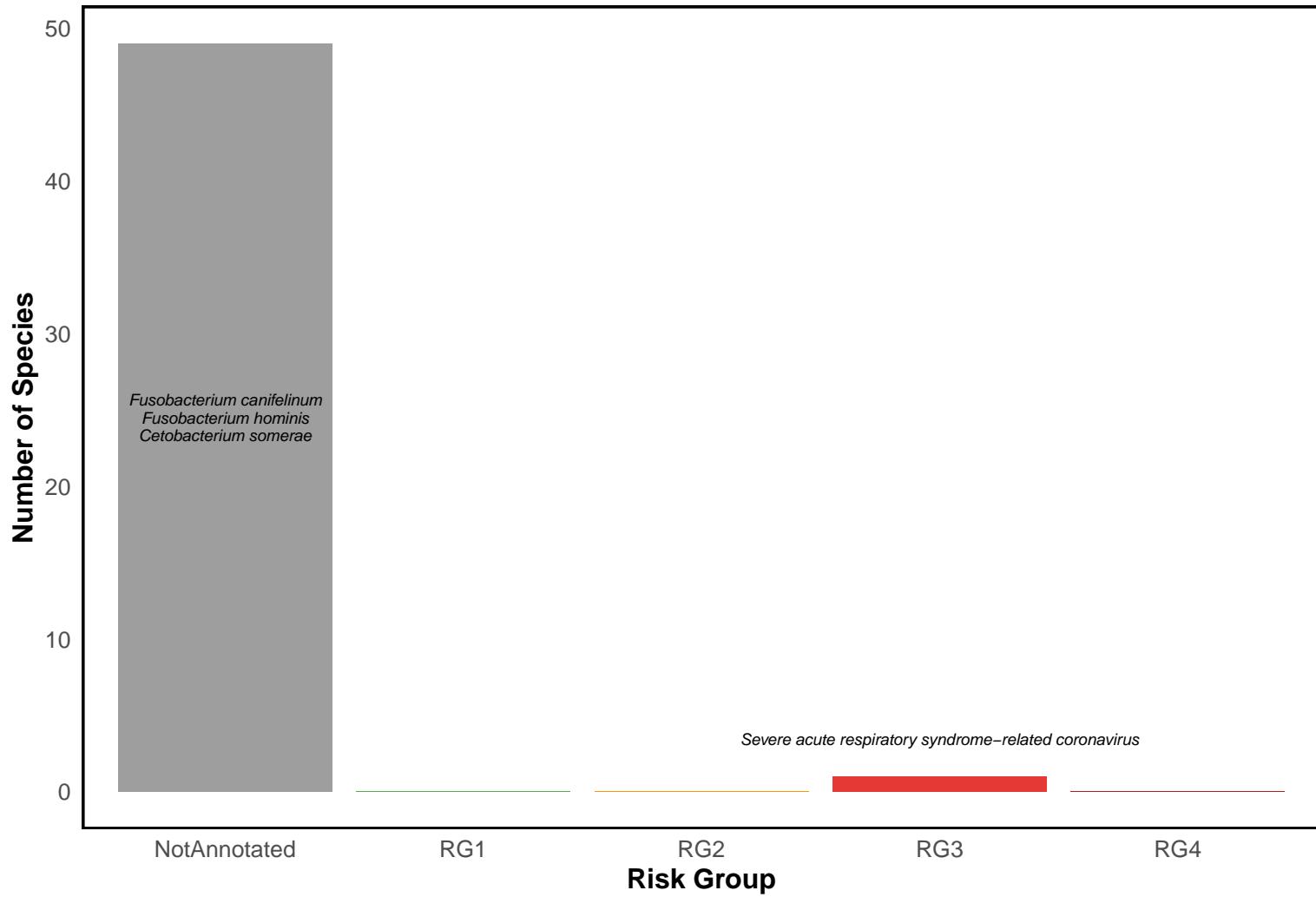
- Include: RG3, RG4 risk groups
- Exclude: RG1, RG2 risk groups
- Exclude: Species annotated as 'Microbiome' in HOMD.Category

Key findings:

- Total species in sample: 193
- Potential pathogenic species identified: 50
- Most abundant pathogen: *Lachnoanaerobaculum gingivalis*
- Average pathogen reads: 39342.8

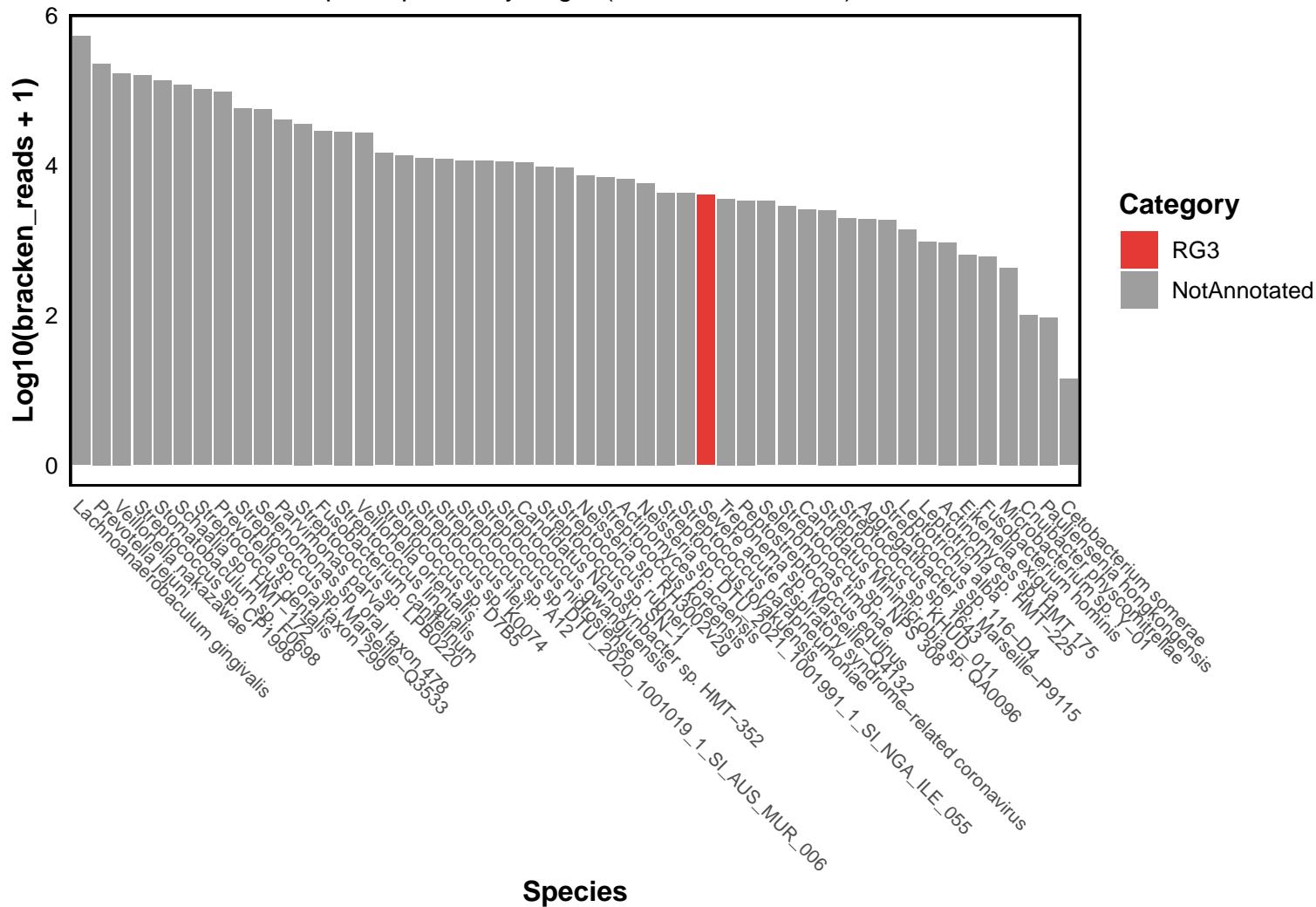
Species per Risk Group – W61402281 – Pathogens

Total species: 50



Species by Risk Group – W61402281 – Pathogens

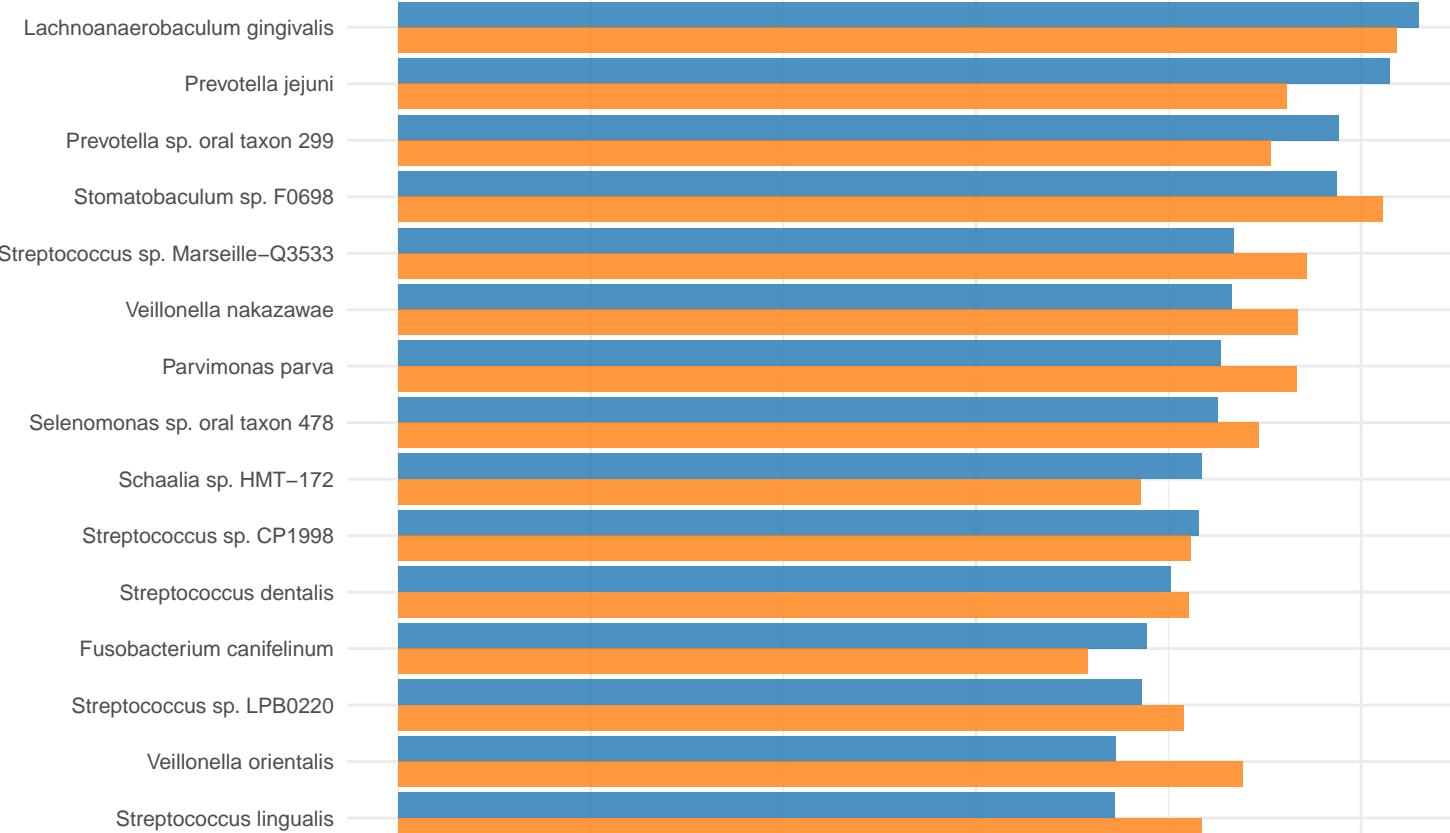
Top 50 species by Log10(bracken_reads + 1)



Pathogen Detection: Sample vs Batch Comparison

Sample: W61402281 | Top 15 pathogenic species by sample cladeReads (log scale)

Data Source Batch Mean Sample W61402281



10

1,000

100,000

CladeReads (log scale)

Part 5: Pathogen Detection (RG3/4 Species) – W61402322

Pathogen detection analysis for sample W61402322:

Filtering criteria:

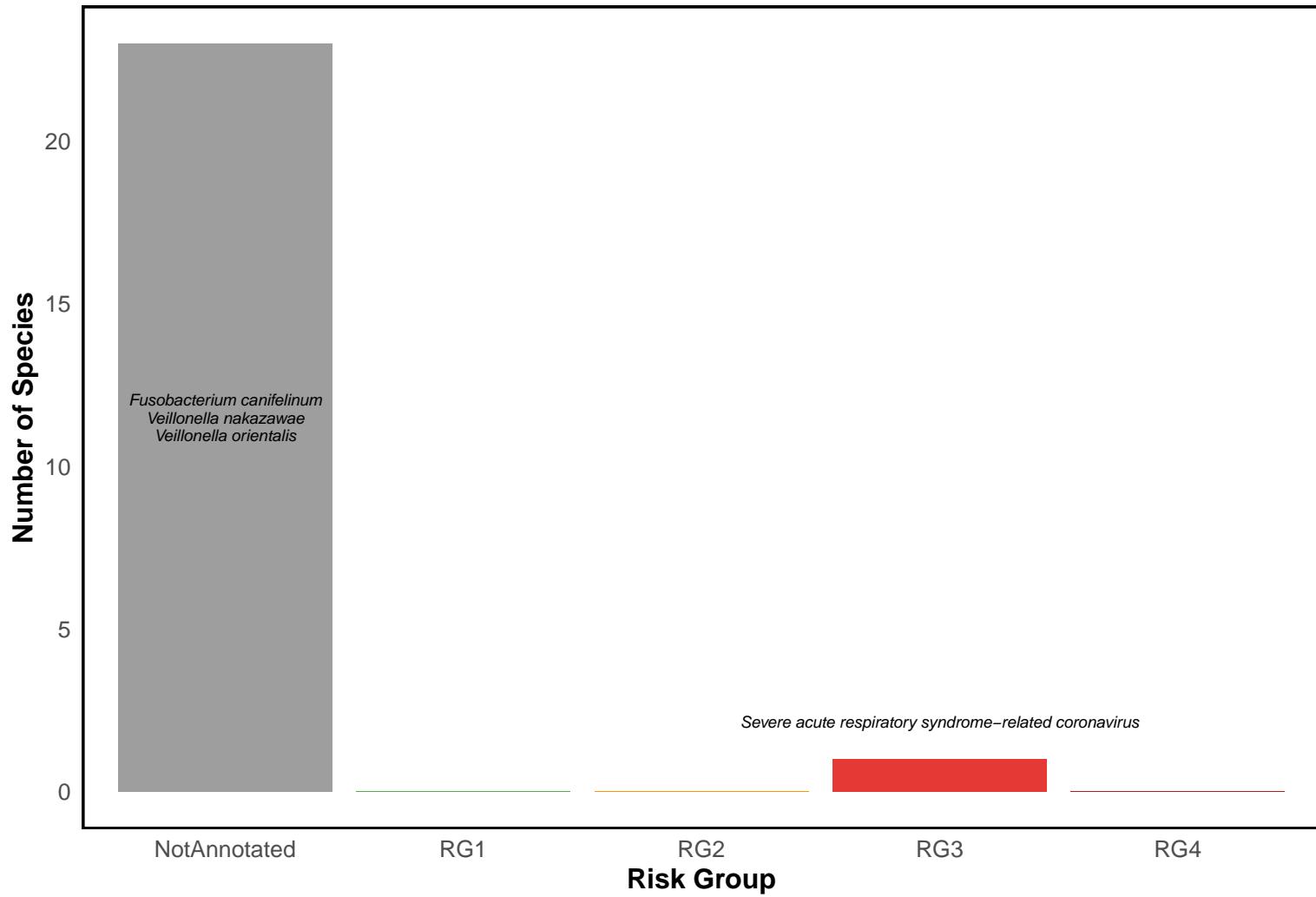
- Include: RG3, RG4 risk groups
- Exclude: RG1, RG2 risk groups
- Exclude: Species annotated as 'Microbiome' in HOMD.Category

Key findings:

- Total species in sample: 114
- Potential pathogenic species identified: 24
- Most abundant pathogen: *Lachnoanaerobaculum gingivalis*
- Average pathogen reads: 18341.8

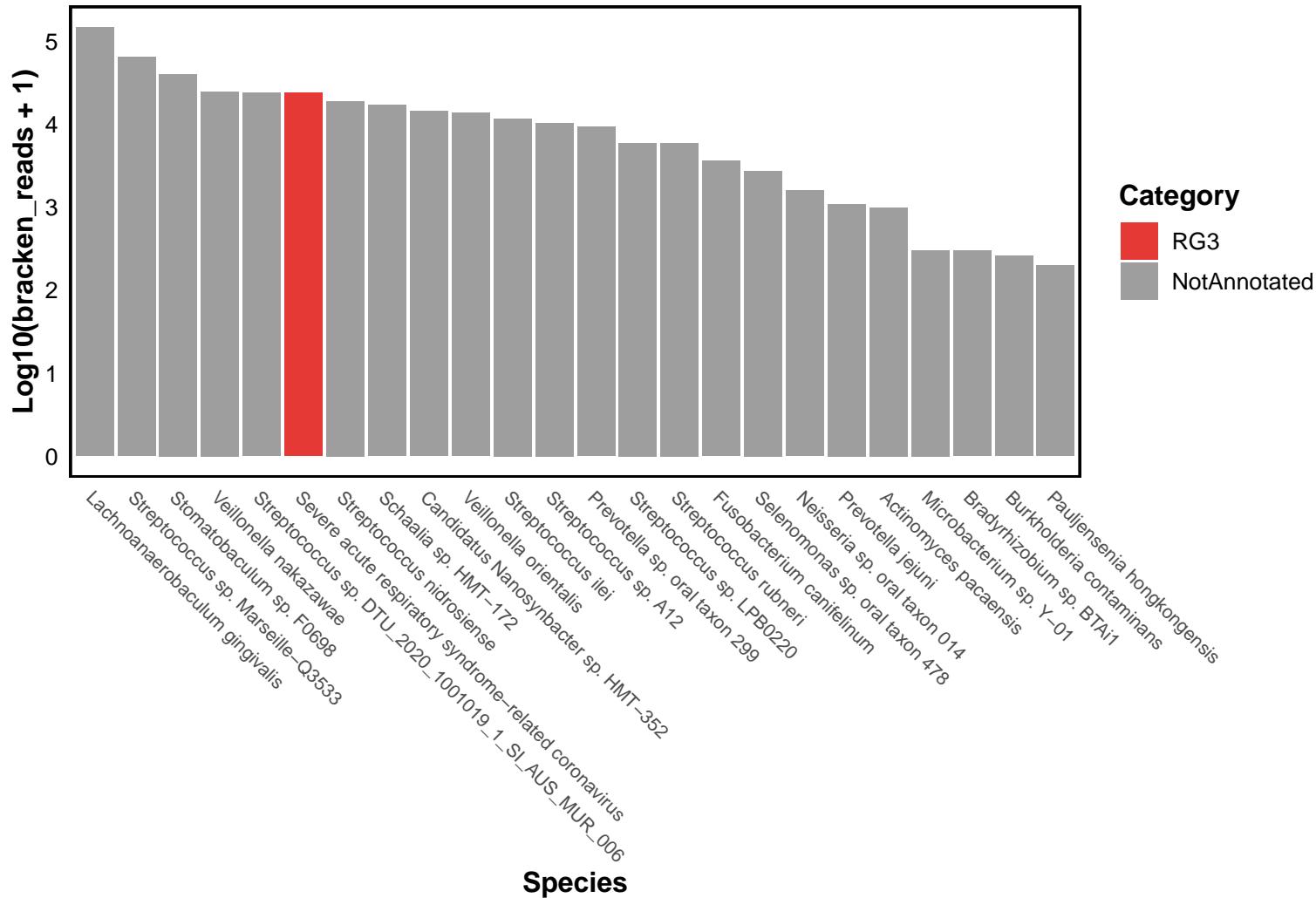
Species per Risk Group – W61402322 – Pathogens

Total species: 24



Species by Risk Group – W61402322 – Pathogens

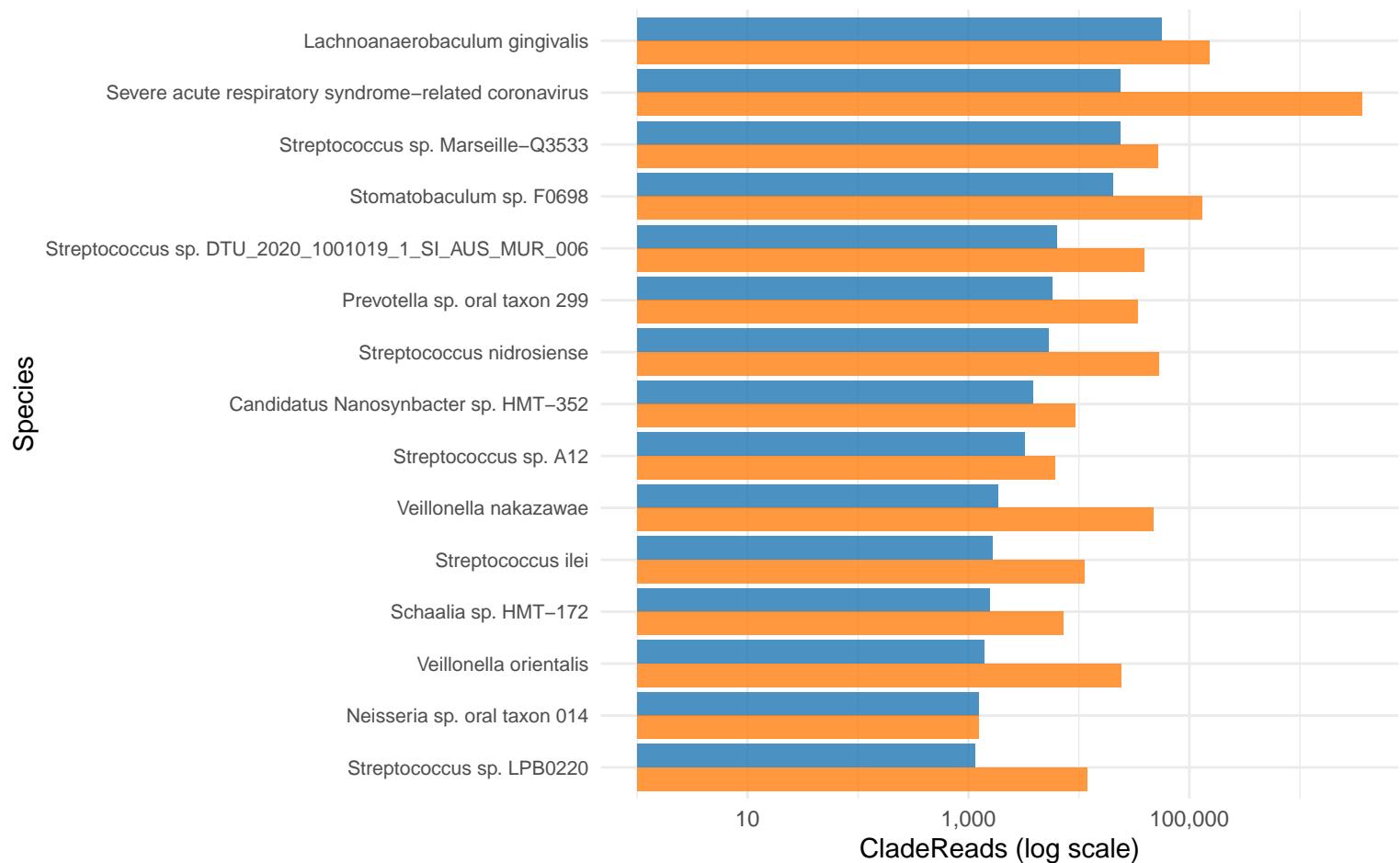
Top 24 species by Log10(bracken_reads + 1)



Pathogen Detection: Sample vs Batch Comparison

Sample: W61402322 | Top 15 pathogenic species by sample cladeR

Data Source Batch Mean Sample W61402322



Part 5: Pathogen Detection (RG3/4 Species) – W61501463

Pathogen detection analysis for sample W61501463:

Filtering criteria:

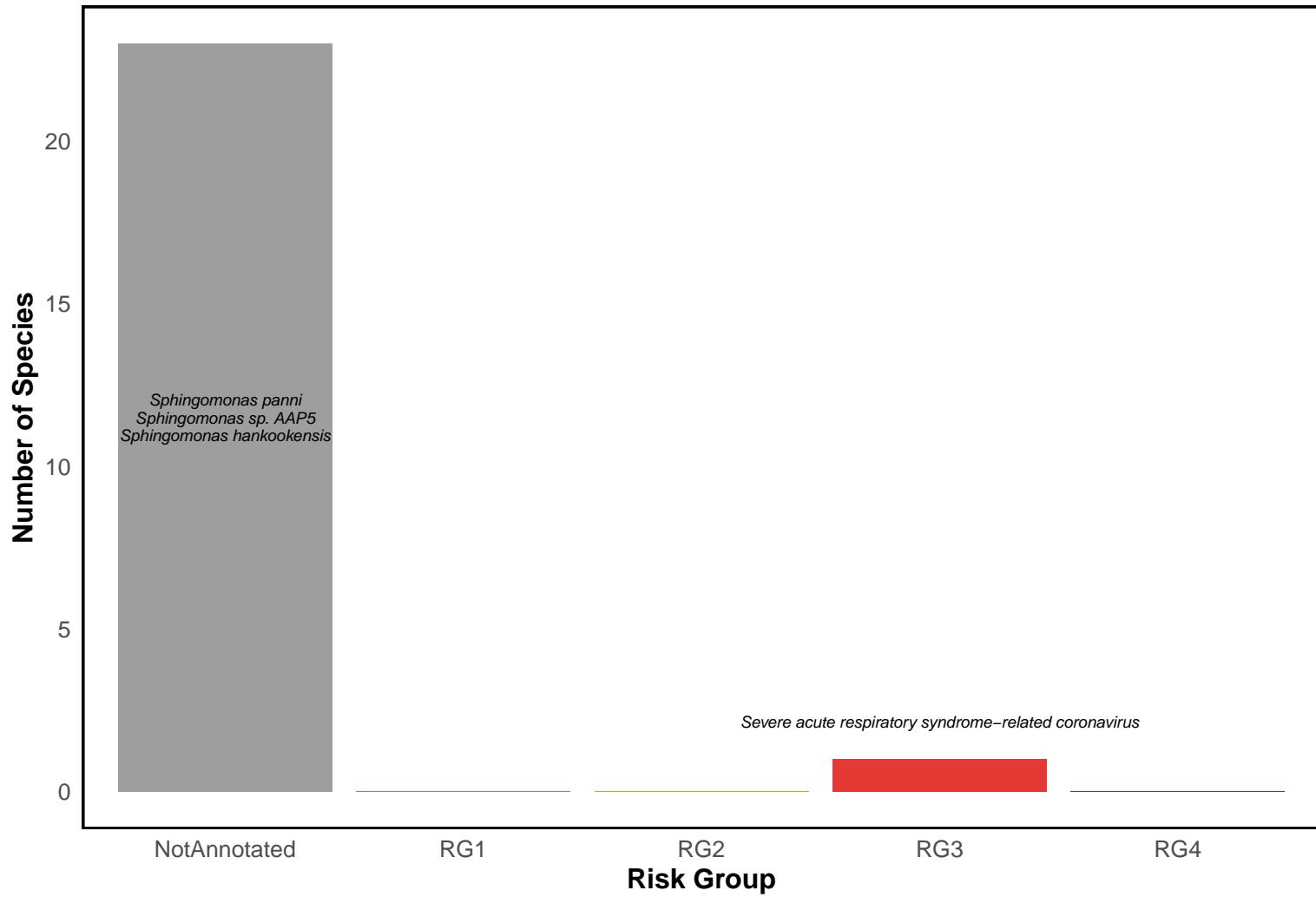
- Include: RG3, RG4 risk groups
- Exclude: RG1, RG2 risk groups
- Exclude: Species annotated as 'Microbiome' in HOMD.Category

Key findings:

- Total species in sample: 45
- Potential pathogenic species identified: 24
- Most abundant pathogen: Severe acute respiratory syndrome-related coronavirus
- Average pathogen reads: 766097.3

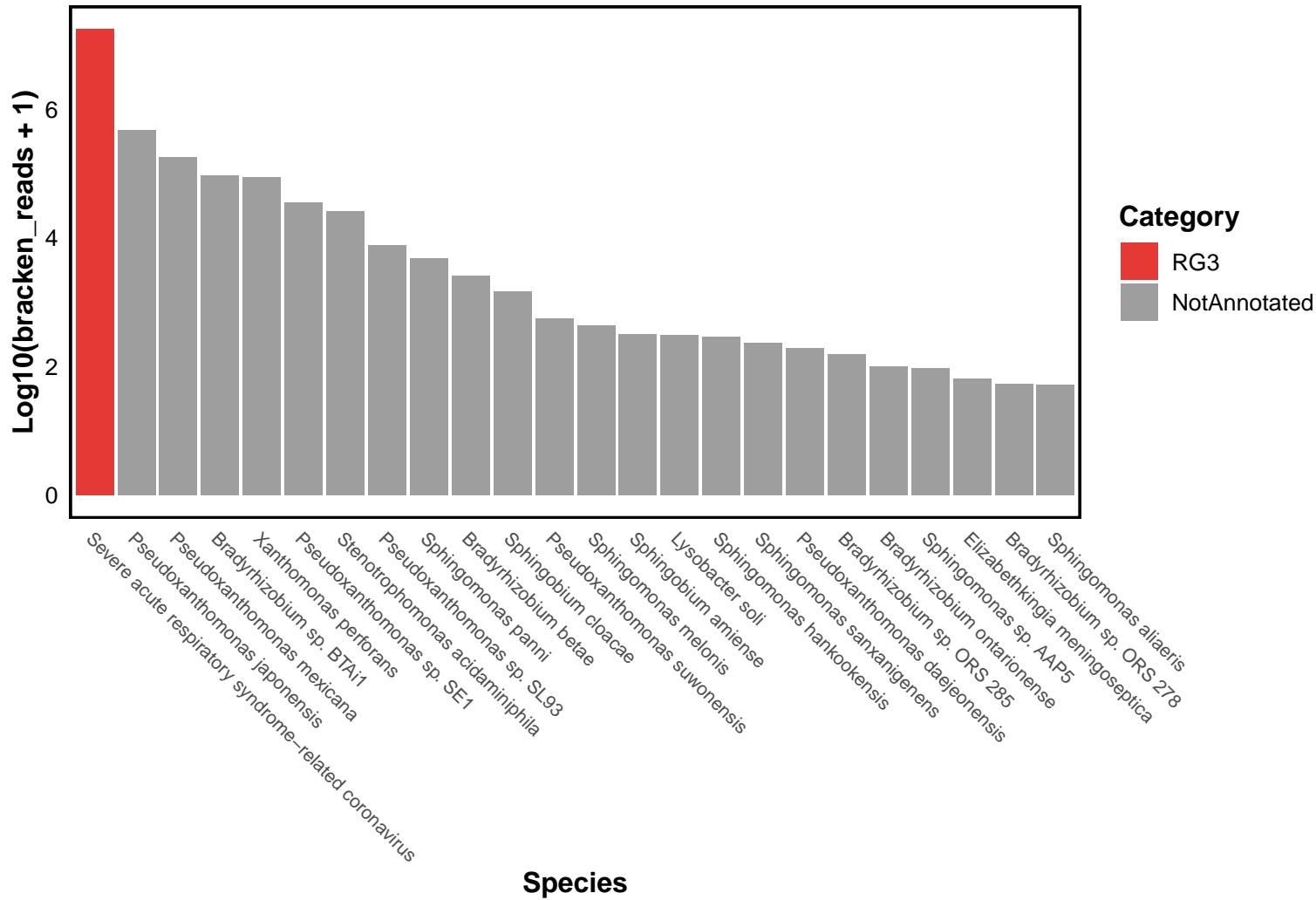
Species per Risk Group – W61501463 – Pathogens

Total species: 24



Species by Risk Group – W61501463 – Pathogens

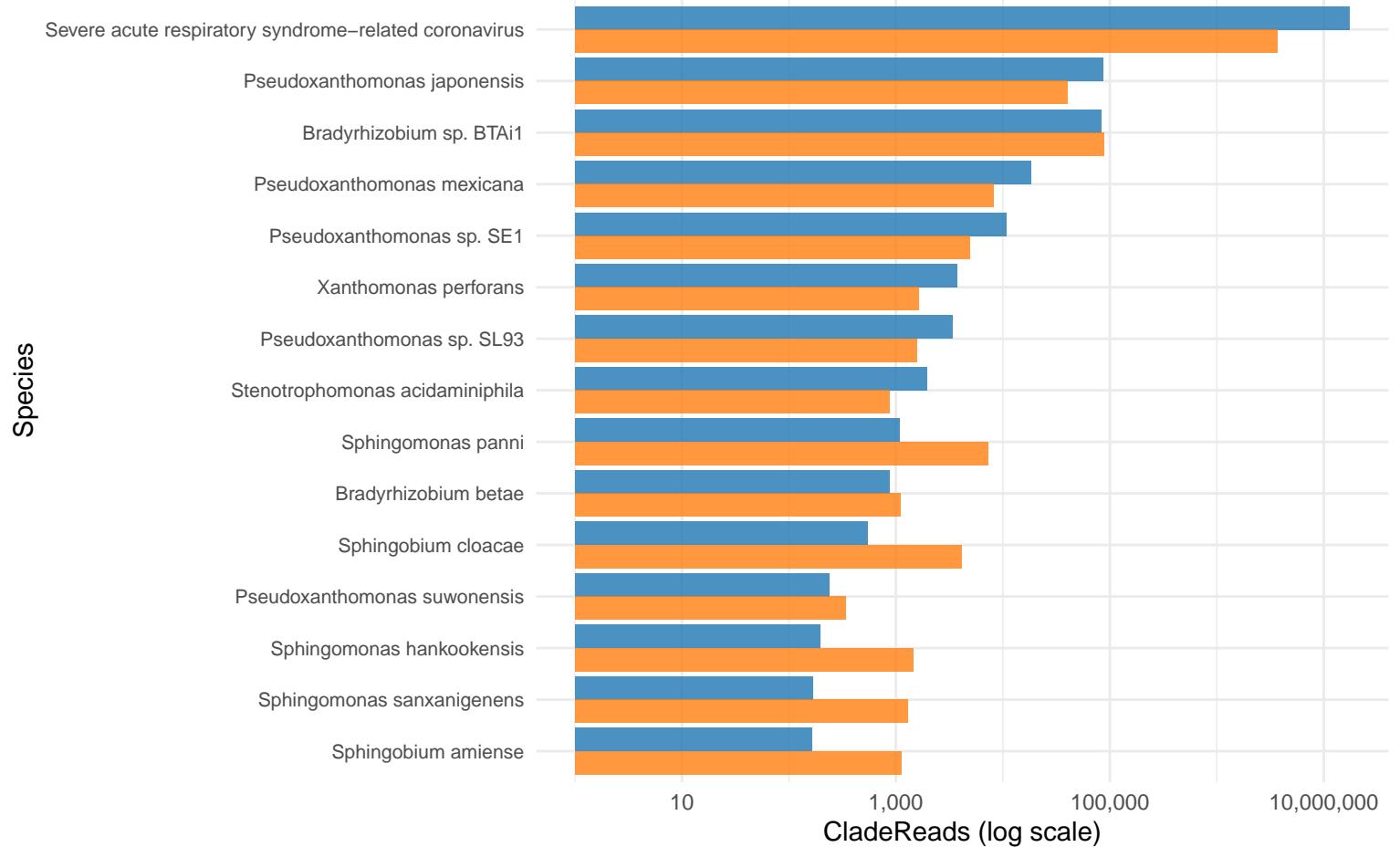
Top 24 species by Log10(bracken_reads + 1)



Pathogen Detection: Sample vs Batch Comparison

Sample: W61501463 | Top 15 pathogenic species by sample cladeReads

Data Source █ Batch Mean █ Sample W61501463



Part 5: Pathogen Detection (RG3/4 Species) – W71607201

Pathogen detection analysis for sample W71607201:

Filtering criteria:

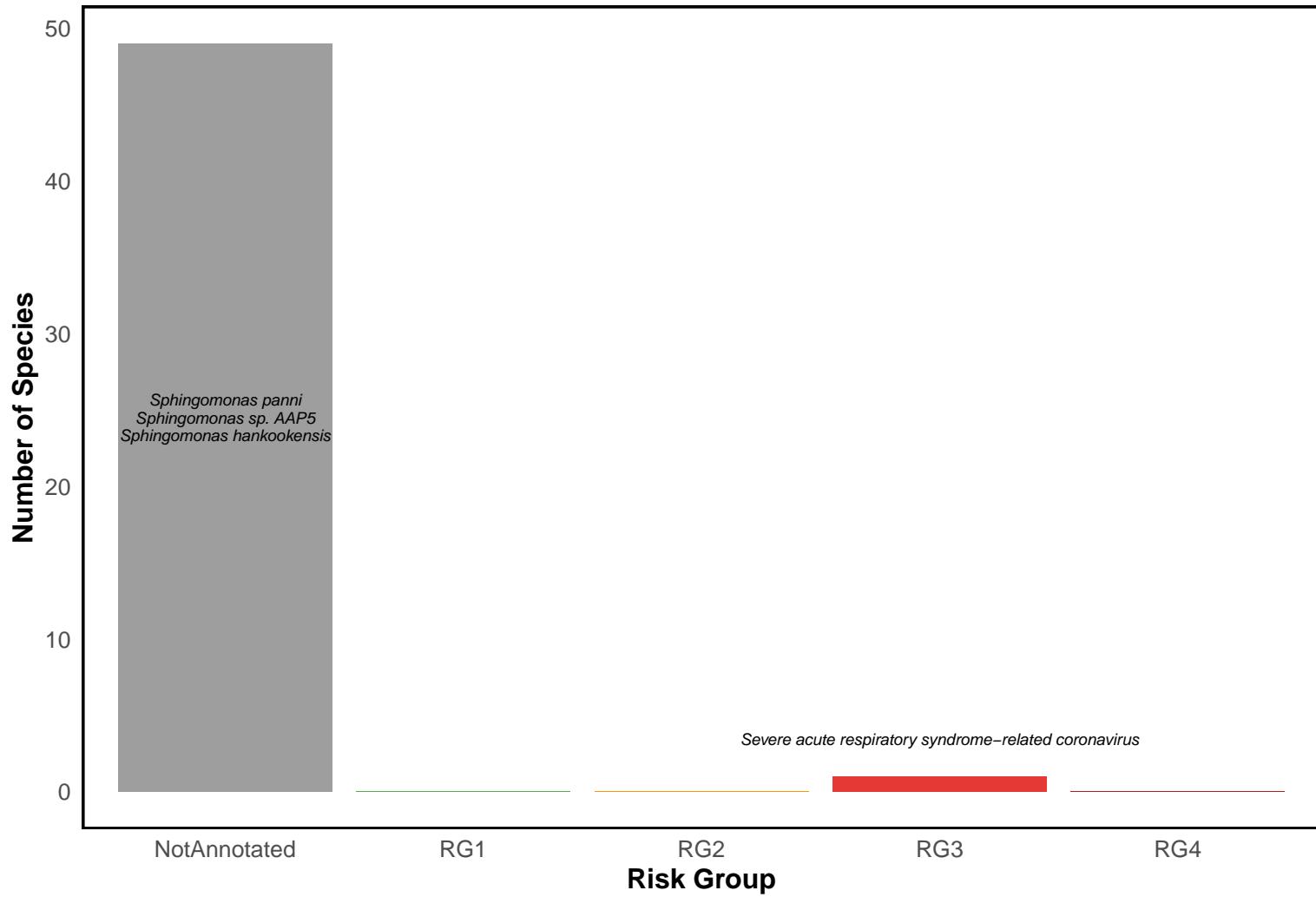
- Include: RG3, RG4 risk groups
- Exclude: RG1, RG2 risk groups
- Exclude: Species annotated as 'Microbiome' in HOMD.Category

Key findings:

- Total species in sample: 77
- Potential pathogenic species identified: 50
- Most abundant pathogen: *Bradyrhizobium* sp. BTA11
- Average pathogen reads: 4966.1

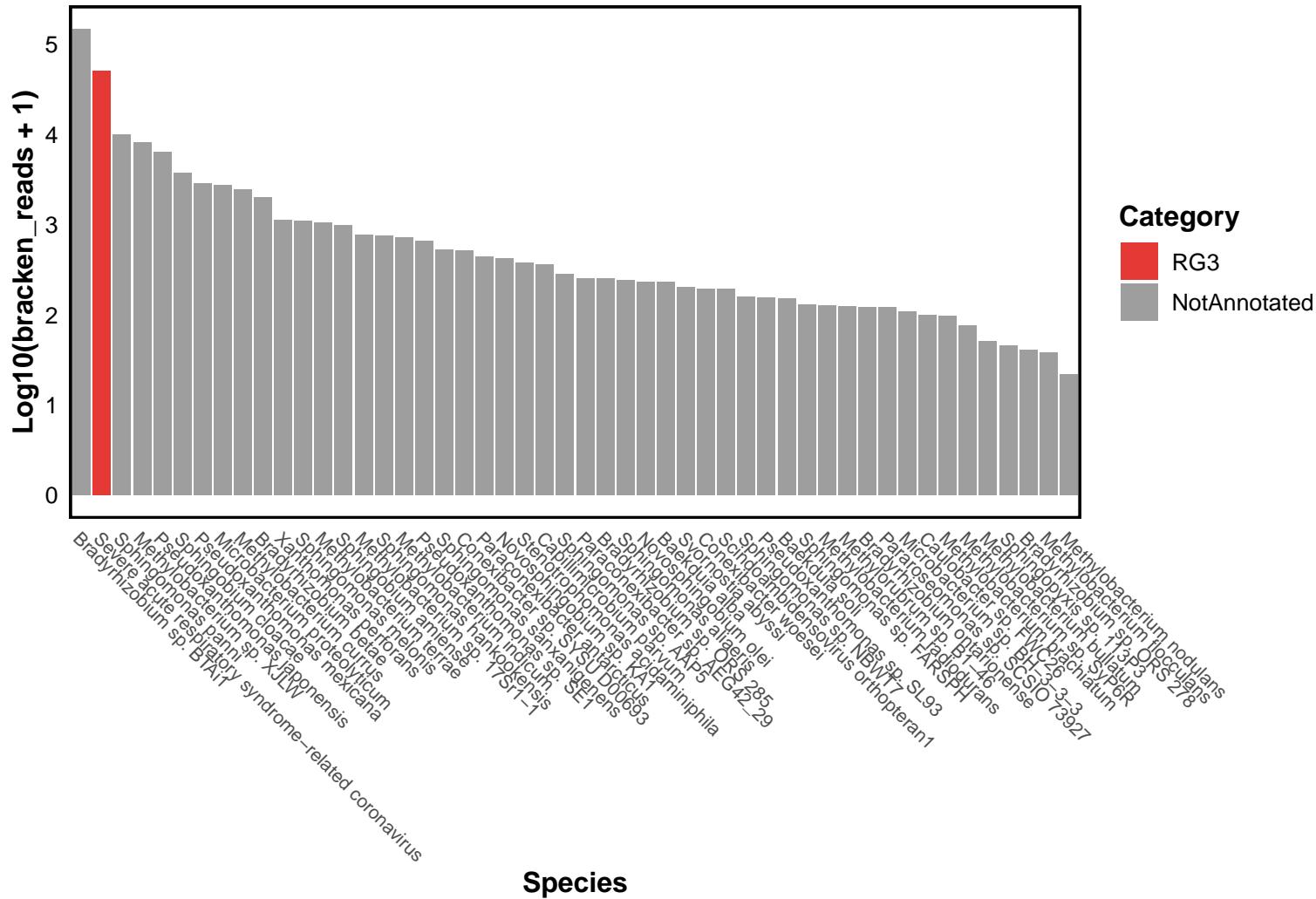
Species per Risk Group – W71607201 – Pathogens

Total species: 50



Species by Risk Group – W71607201 – Pathogens

Top 50 species by Log10(bracken_reads + 1)



Pathogen Detection: Sample vs Batch Comparison

Sample: W71607201 | Top 15 pathogenic species by sample cladeReads

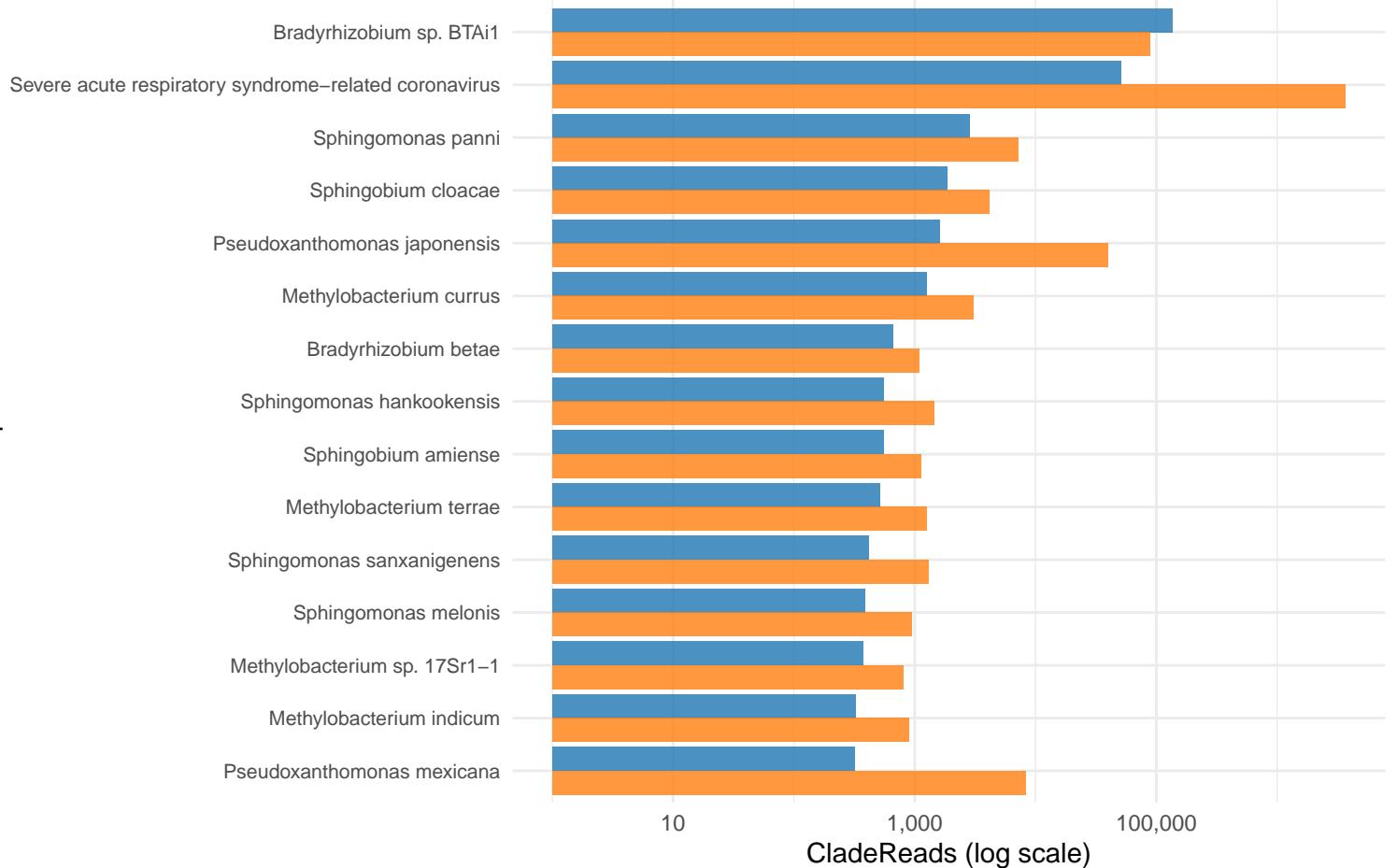
Data Source



Batch Mean

Sample W71607201

Species



Part 5: Pathogen Detection (RG3/4 Species) – W72504187

Pathogen detection analysis for sample W72504187:

Filtering criteria:

- Include: RG3, RG4 risk groups
- Exclude: RG1, RG2 risk groups
- Exclude: Species annotated as 'Microbiome' in HOMD.Category

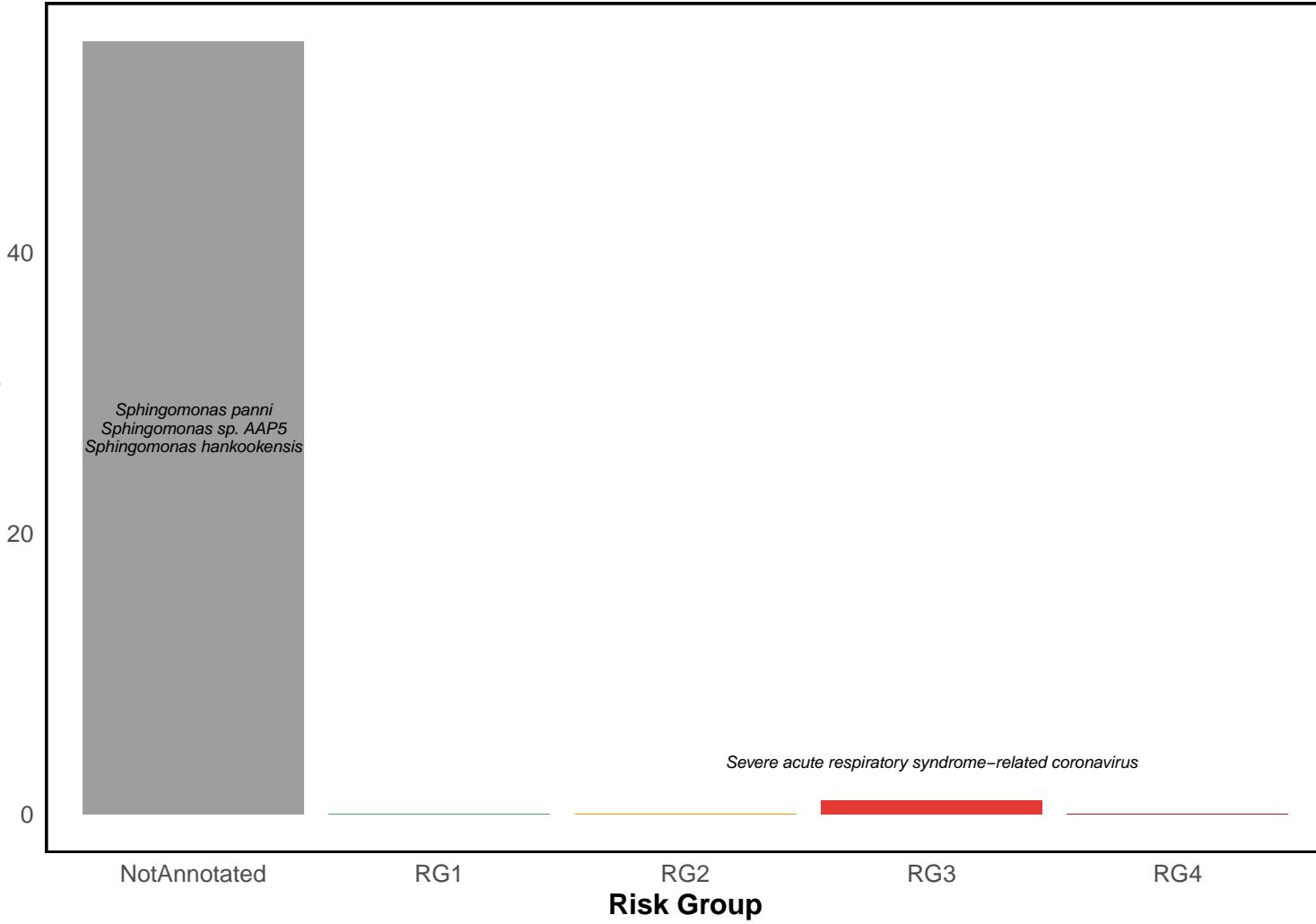
Key findings:

- Total species in sample: 79
- Potential pathogenic species identified: 56
- Most abundant pathogen: *Bradyrhizobium* sp. BTA11
- Average pathogen reads: 10659.6

Species per Risk Group – W72504187 – Pathogens

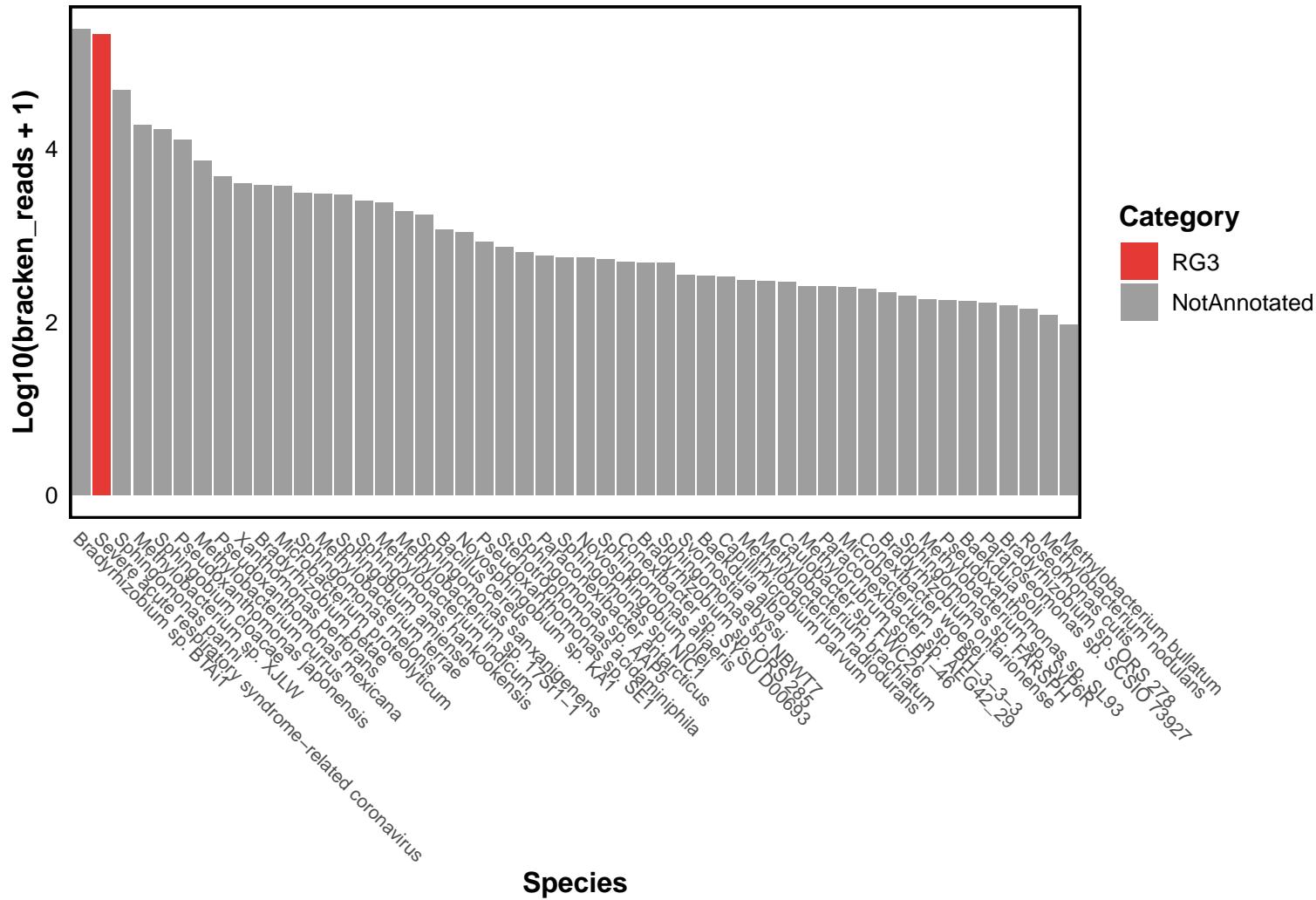
Total species: 56

Number of Species



Species by Risk Group – W72504187 – Pathogens

Top 50 species by Log10(bracken_reads + 1)



Pathogen Detection: Sample vs Batch Comparison

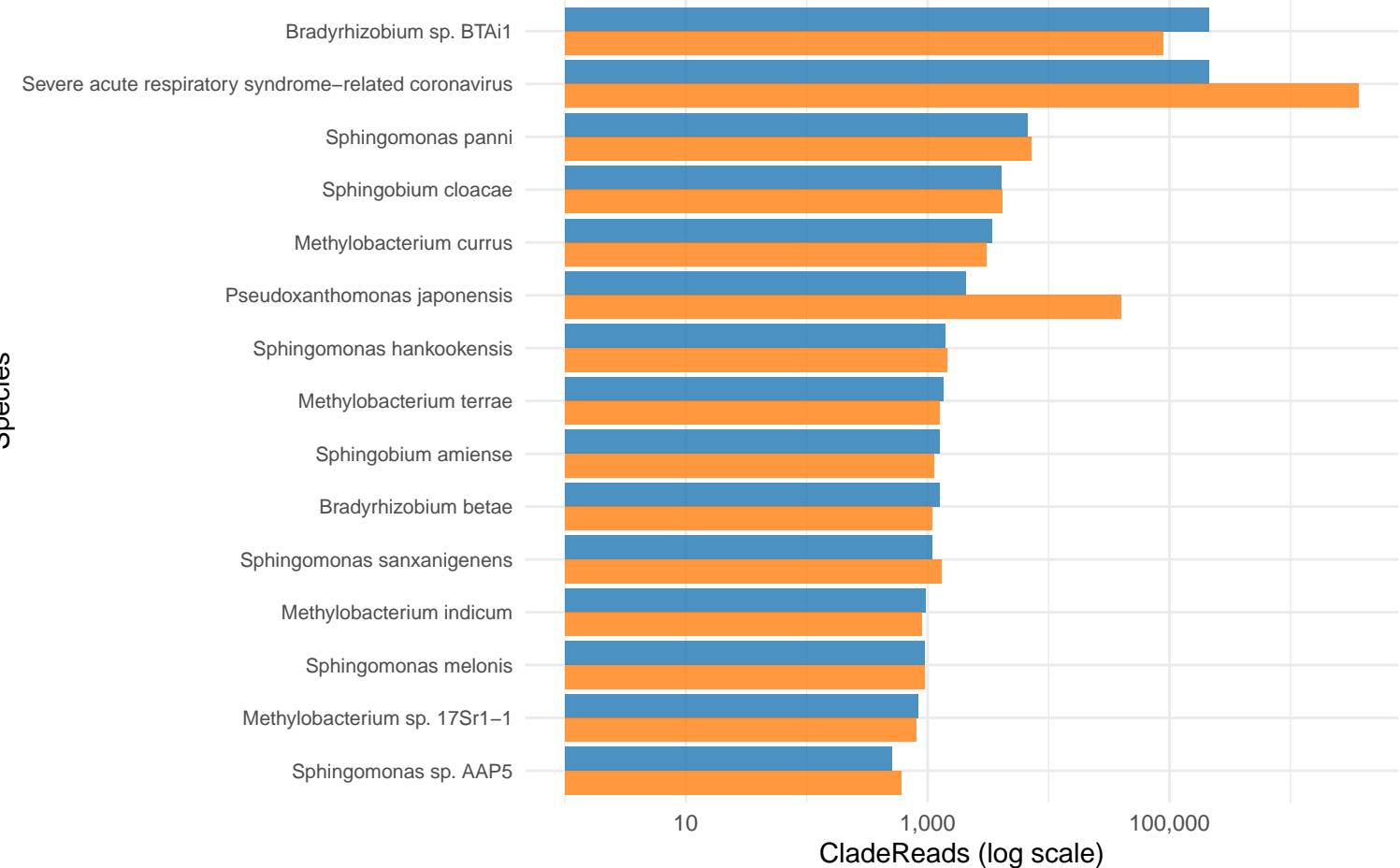
Sample: W72504187 | Top 15 pathogenic species by sample cladeReads

Data Source



Batch Mean

Sample W72504187



Part 5: Pathogen Detection (RG3/4 Species) – W72803699

Pathogen detection analysis for sample W72803699:

Filtering criteria:

- Include: RG3, RG4 risk groups
- Exclude: RG1, RG2 risk groups
- Exclude: Species annotated as 'Microbiome' in HOMD.Category

Key findings:

- Total species in sample: 254
- Potential pathogenic species identified: 102
- Most abundant pathogen: Streptococcus sp. FSL K6-1323
- Average pathogen reads: 91296.6

Species per Risk Group – W72803699 – Pathogens

Total species: 102

Number of Species

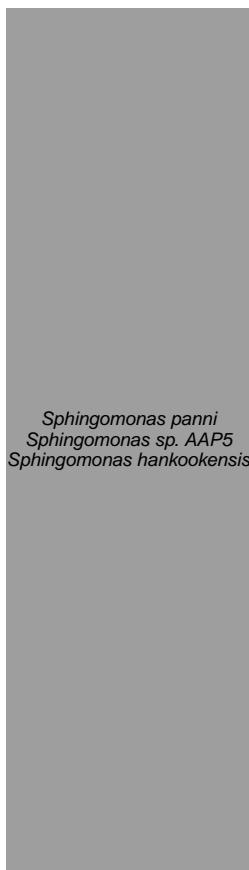
100

75

50

25

0



NotAnnotated

RG1

RG2

RG3

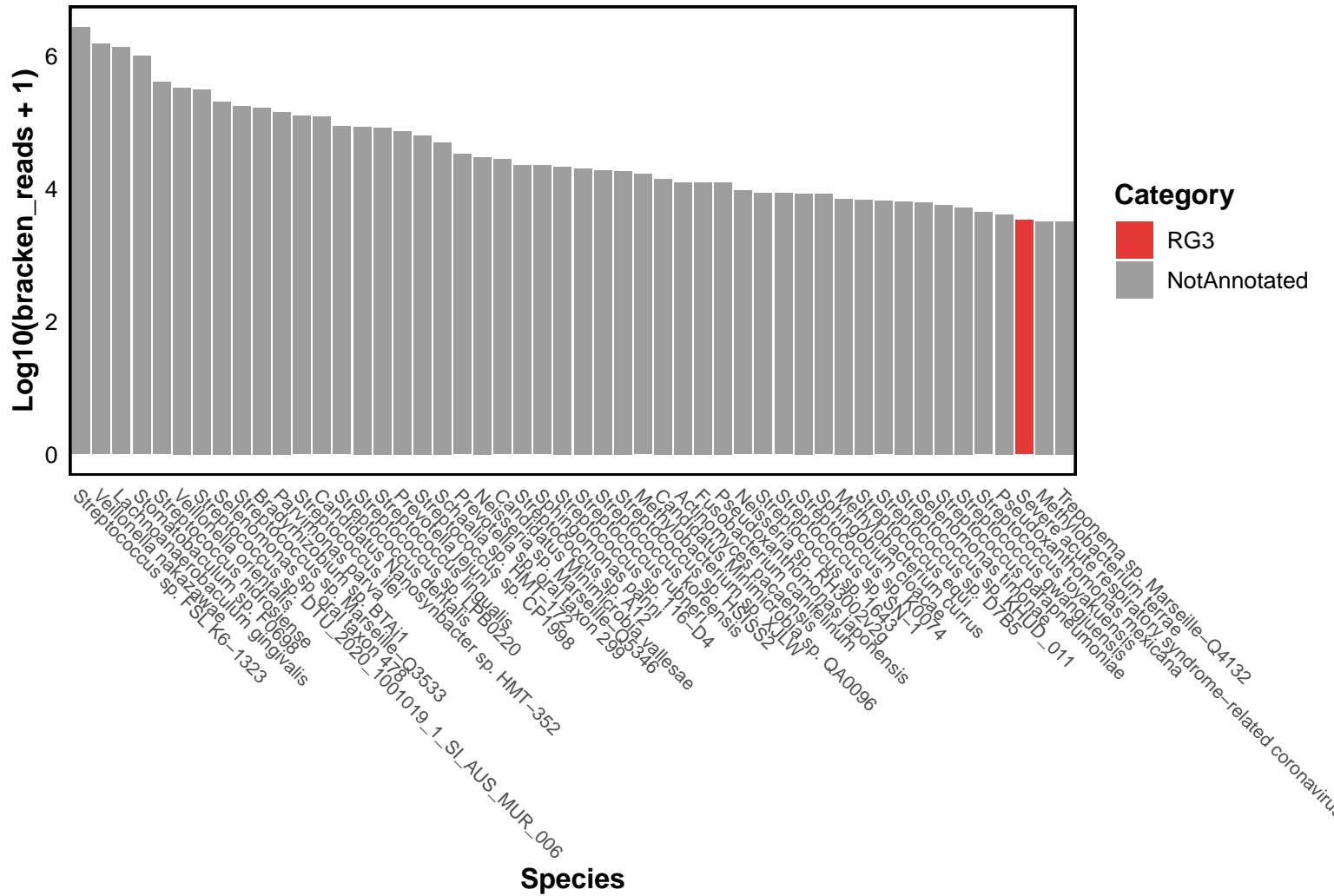
RG4

Risk Group

Severe acute respiratory syndrome-related coronavirus

Species by Risk Group – W72803699 – Pathogens

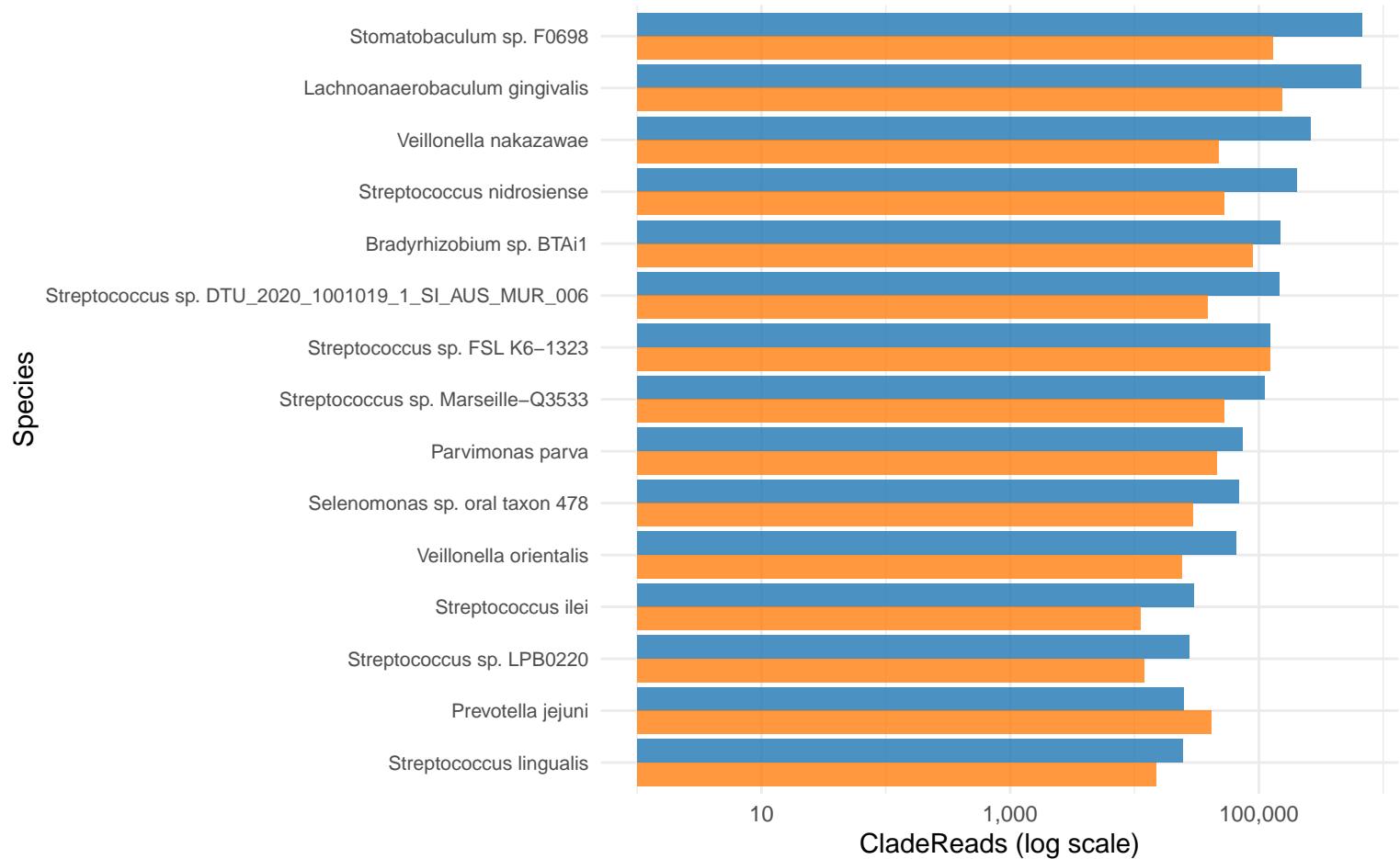
Top 50 species by Log10(bracken_reads + 1)



Pathogen Detection: Sample vs Batch Comparison

Sample: W72803699 | Top 15 pathogenic species by sample cladeR

Data Source █ Batch Mean █ Sample W72803699



Part 5: Pathogen Detection (RG3/4 Species) – W72902029

Pathogen detection analysis for sample W72902029:

Filtering criteria:

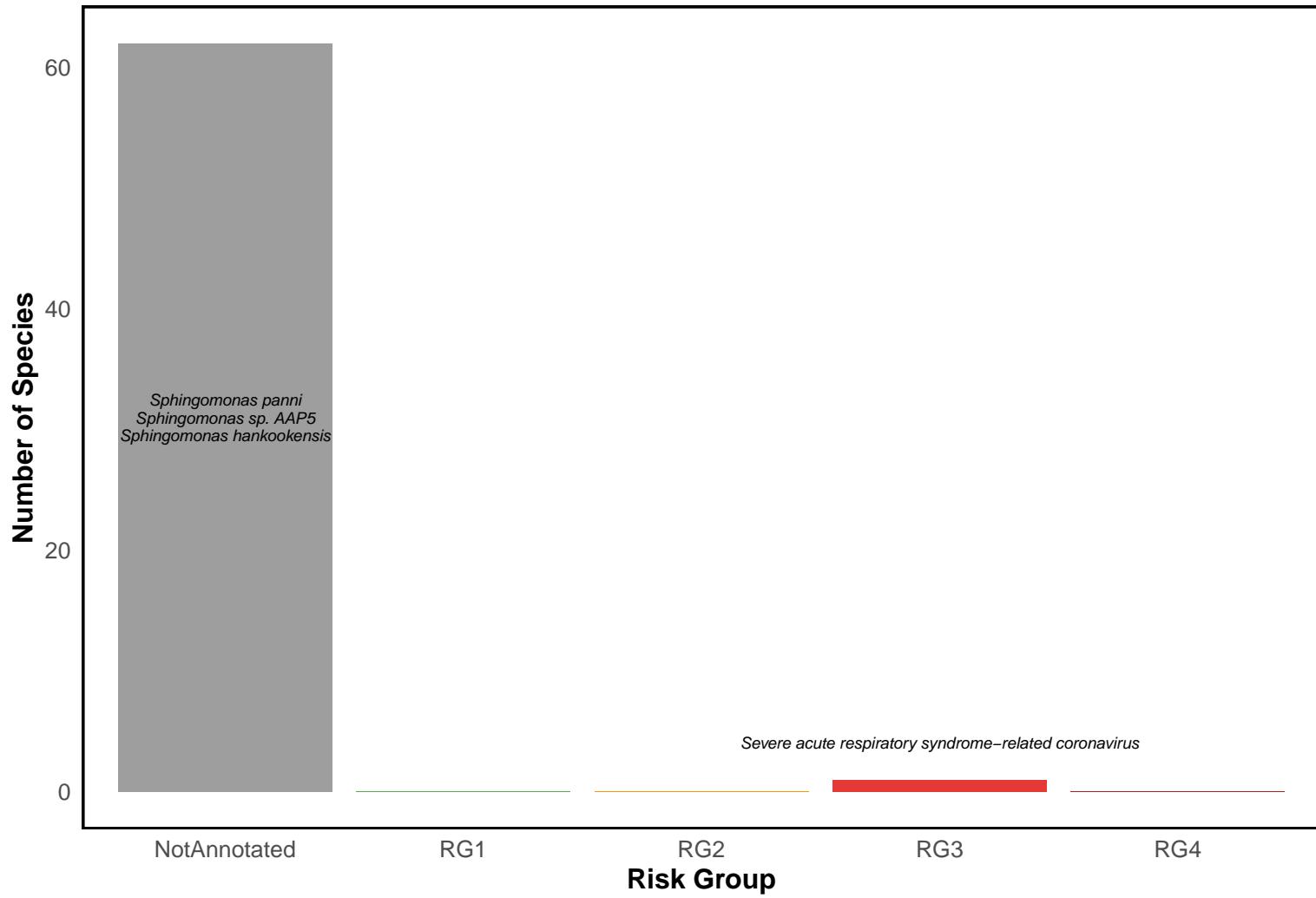
- Include: RG3, RG4 risk groups
- Exclude: RG1, RG2 risk groups
- Exclude: Species annotated as 'Microbiome' in HOMD.Category

Key findings:

- Total species in sample: 104
- Potential pathogenic species identified: 63
- Most abundant pathogen: *Bradyrhizobium* sp. BTAi1
- Average pathogen reads: 9015.3

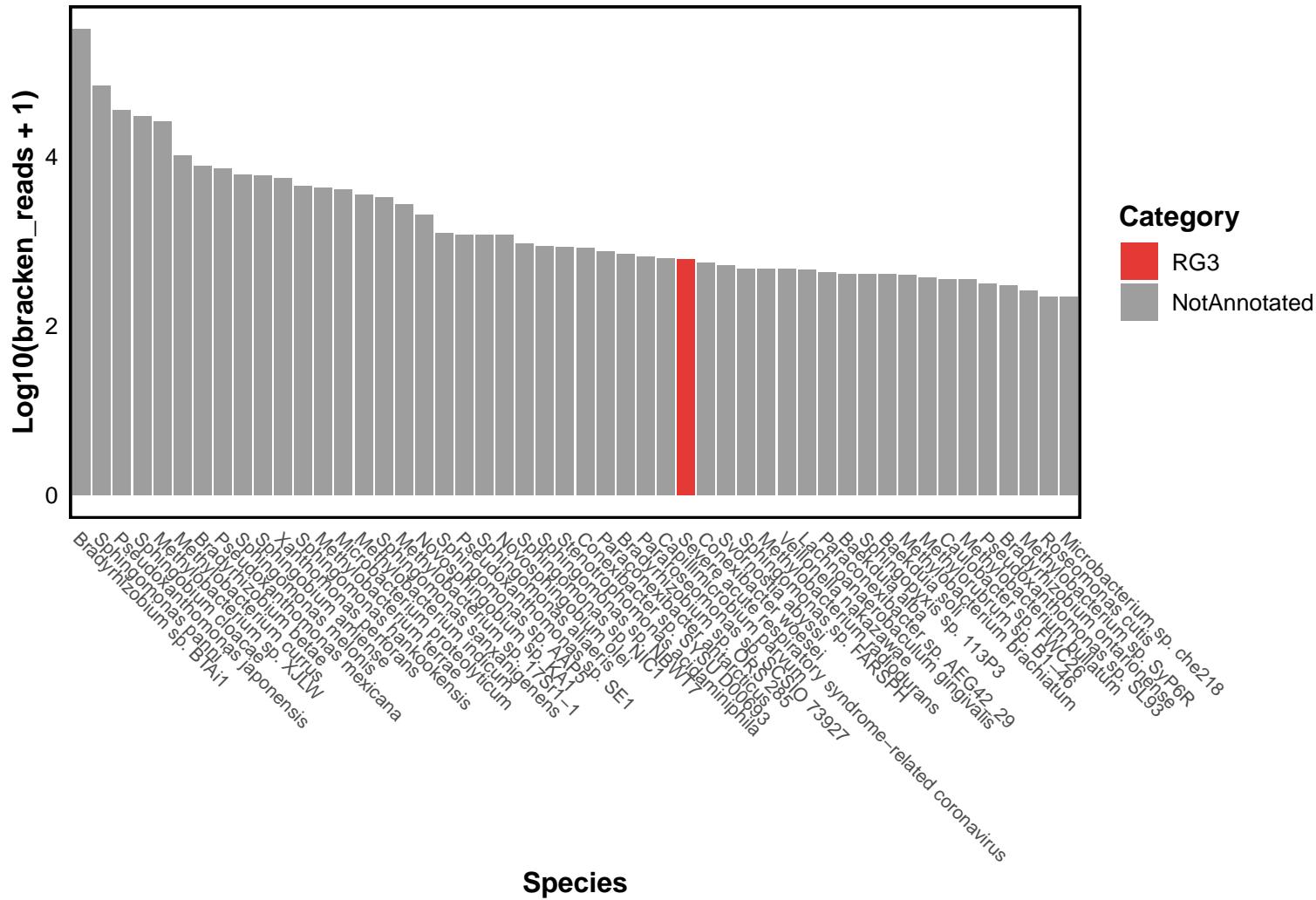
Species per Risk Group – W72902029 – Pathogens

Total species: 63



Species by Risk Group – W72902029 – Pathogens

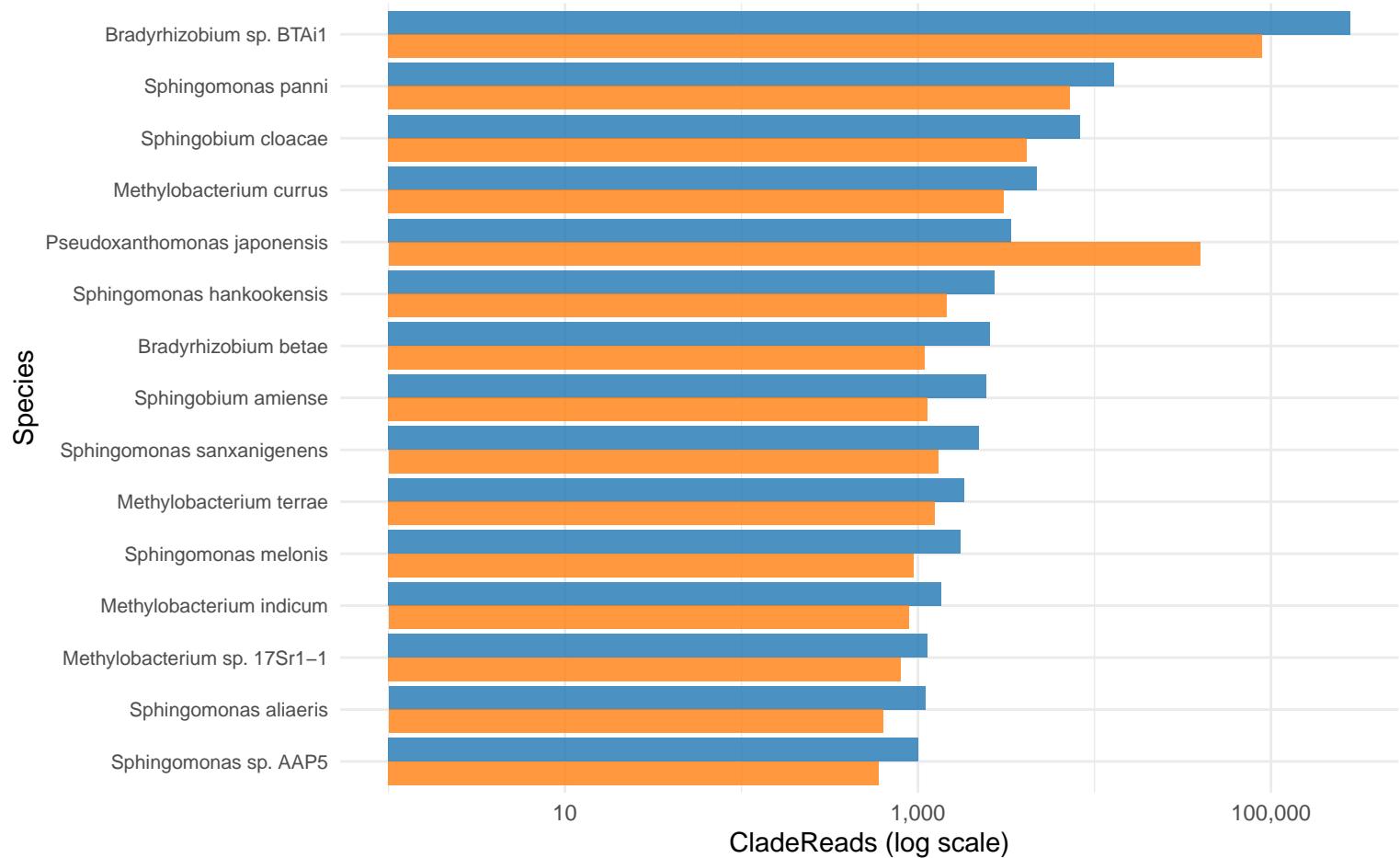
Top 50 species by Log10(bracken_reads + 1)



Pathogen Detection: Sample vs Batch Comparison

Sample: W72902029 | Top 15 pathogenic species by sample cladeReads (log scale)

Data Source Batch Mean Sample W72902029



Part 5: Pathogen Detection (RG3/4 Species) – W73007482

Pathogen detection analysis for sample W73007482:

Filtering criteria:

- Include: RG3, RG4 risk groups
- Exclude: RG1, RG2 risk groups
- Exclude: Species annotated as 'Microbiome' in HOMD.Category

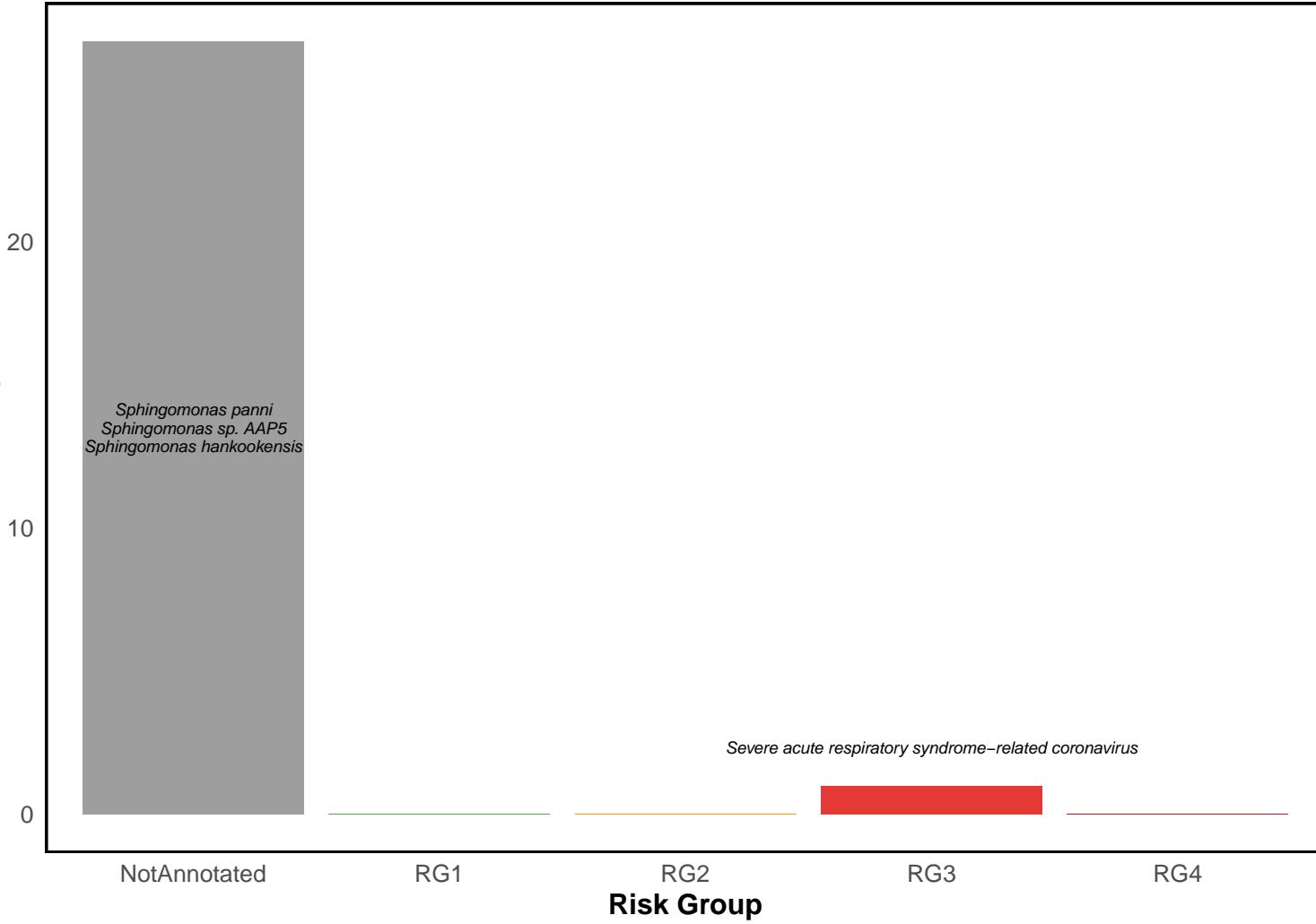
Key findings:

- Total species in sample: 60
- Potential pathogenic species identified: 28
- Most abundant pathogen: Pseudoxanthomonas japonensis
- Average pathogen reads: 65921.1

Species per Risk Group – W73007482 – Pathogens

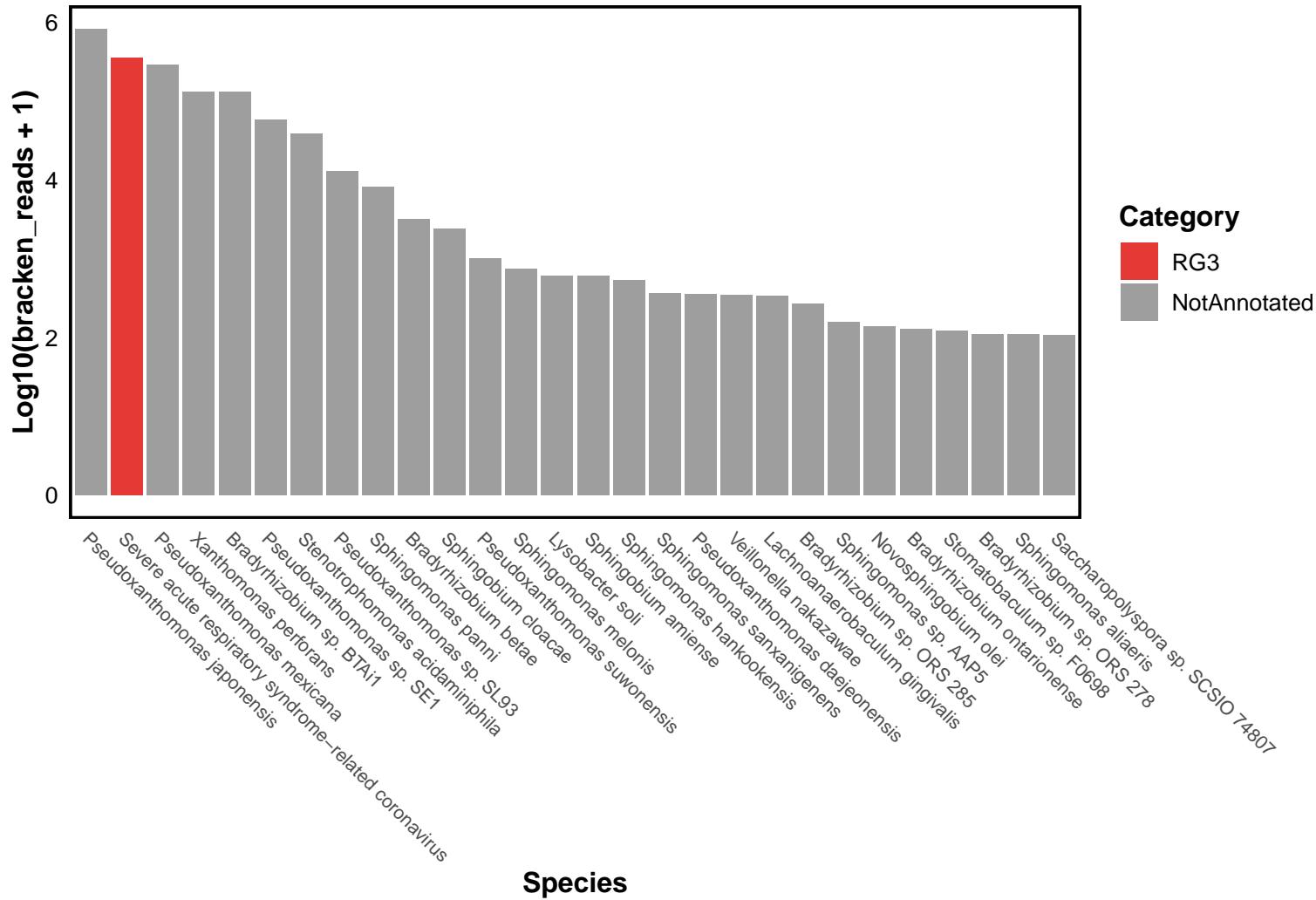
Total species: 28

Number of Species



Species by Risk Group – W73007482 – Pathogens

Top 28 species by Log10(bracken_reads + 1)



Pathogen Detection: Sample vs Batch Comparison

Sample: W73007482 | Top 15 pathogenic species by sample cladeReads

Data Source



Batch Mean

Sample W73007482

Severe acute respiratory syndrome-related coronavirus



Pseudoxanthomonas japonensis



Bradyrhizobium sp. BTa1



Pseudoxanthomonas mexicana



Pseudoxanthomonas sp. SE1



Pseudoxanthomonas sp. SL93



Xanthomonas perforans



Stenotrophomonas acidaminiphila



Sphingomonas pannii



Bradyrhizobium betae



Sphingobium cloacae



Pseudoxanthomonas suwonensis



Sphingomonas hankookensis



Sphingobium amiense



Sphingomonas sanxanigenens



10

1,000

100,000

CladeReads (log scale)

Species

Part 5: Pathogen Detection (RG3/4 Species) – W73007677

Pathogen detection analysis for sample W73007677:

Filtering criteria:

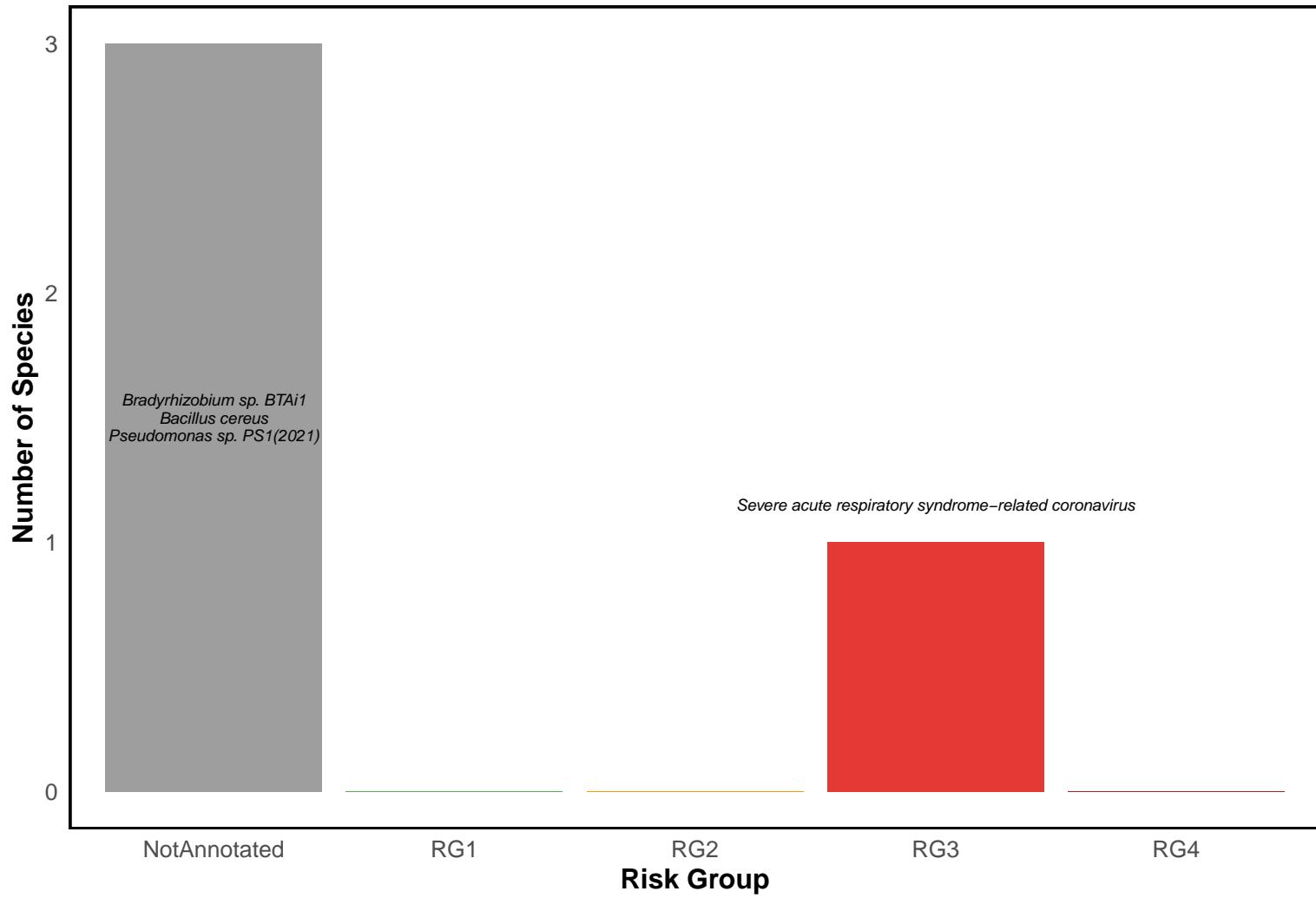
- Include: RG3, RG4 risk groups
- Exclude: RG1, RG2 risk groups
- Exclude: Species annotated as 'Microbiome' in HOMD.Category

Key findings:

- Total species in sample: 26
- Potential pathogenic species identified: 4
- Most abundant pathogen: Severe acute respiratory syndrome-related coronavirus
- Average pathogen reads: 2684263.5

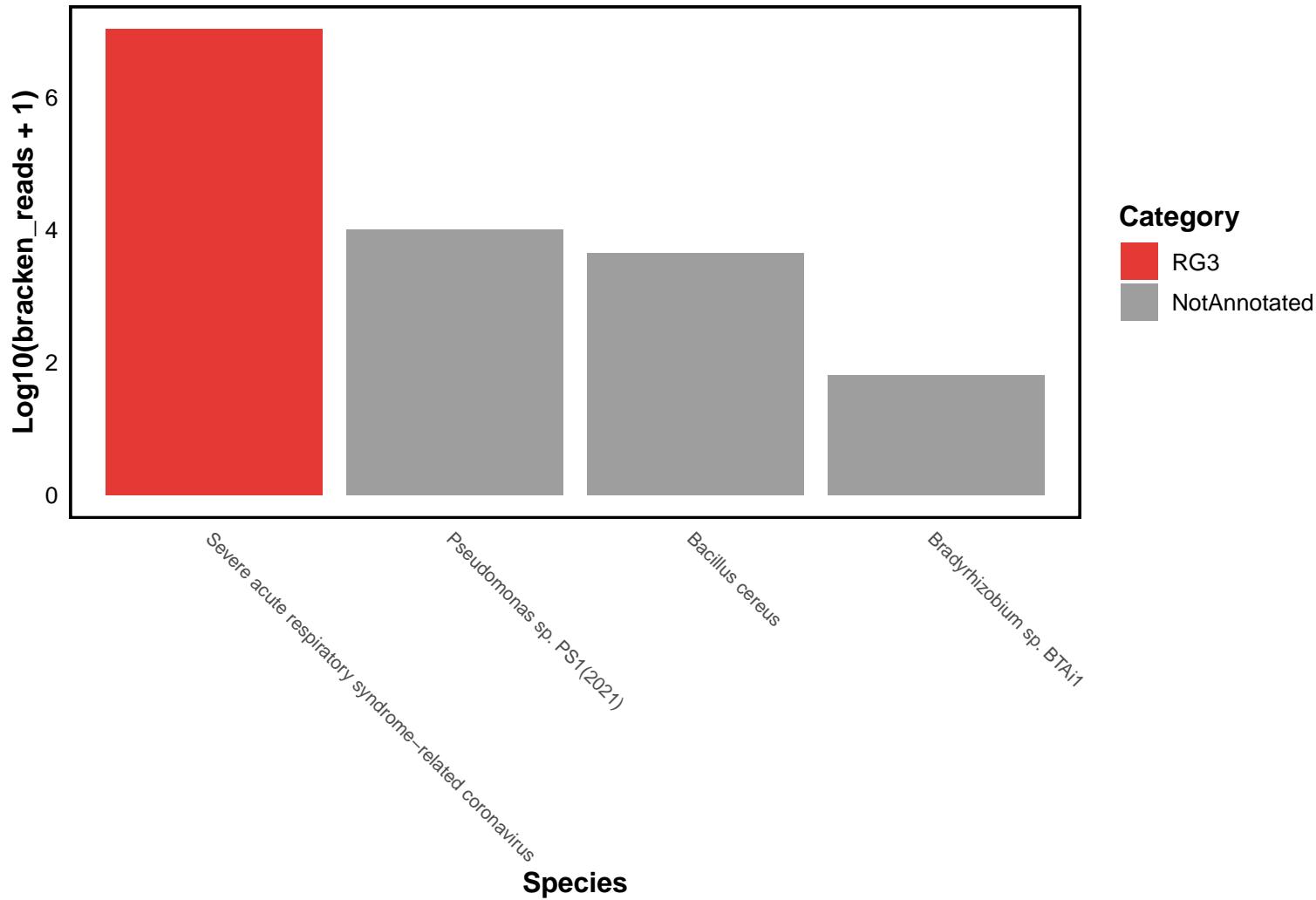
Species per Risk Group – W73007677 – Pathogens

Total species: 4



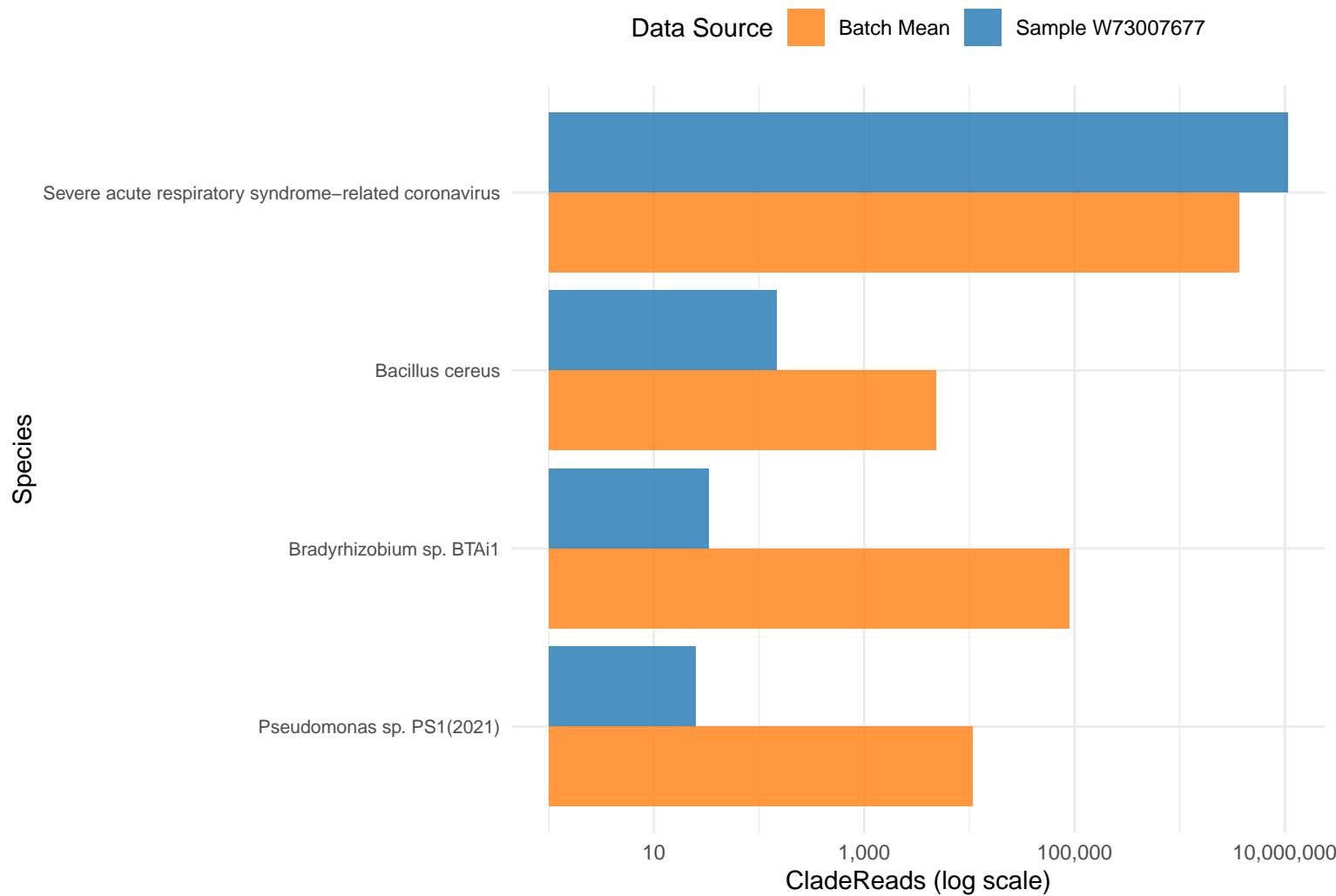
Species by Risk Group – W73007677 – Pathogens

Top 4 species by Log10(bracken_reads + 1)



Pathogen Detection: Sample vs Batch Comparison

Sample: W73007677 | Top 15 pathogenic species by sample cladeReads



Part 5: Pathogen Detection (RG3/4 Species) – W73007934

Pathogen detection analysis for sample W73007934:

Filtering criteria:

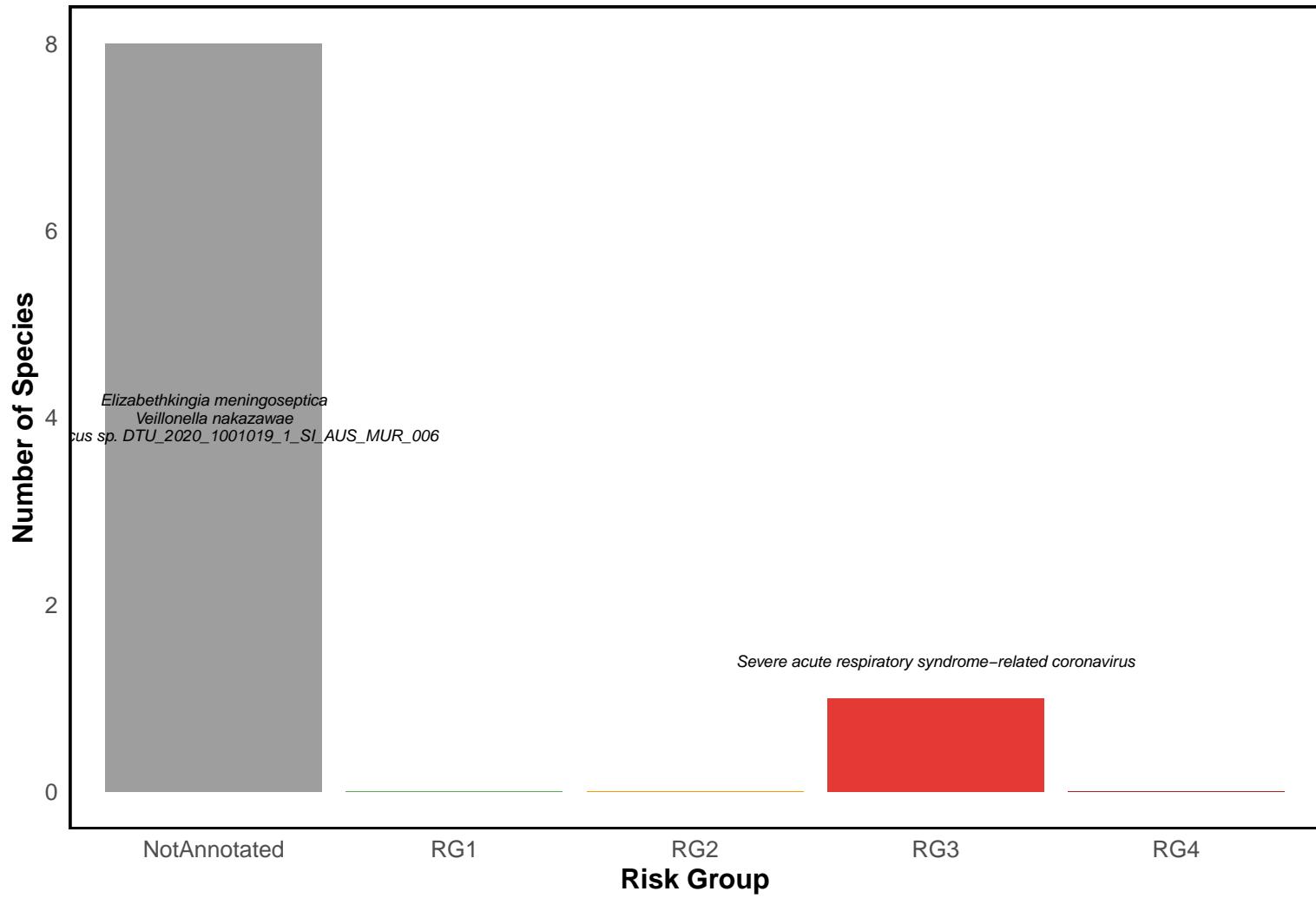
- Include: RG3, RG4 risk groups
- Exclude: RG1, RG2 risk groups
- Exclude: Species annotated as 'Microbiome' in HOMD.Category

Key findings:

- Total species in sample: 40
- Potential pathogenic species identified: 9
- Most abundant pathogen: Severe acute respiratory syndrome-related coronavirus
- Average pathogen reads: 2104.7

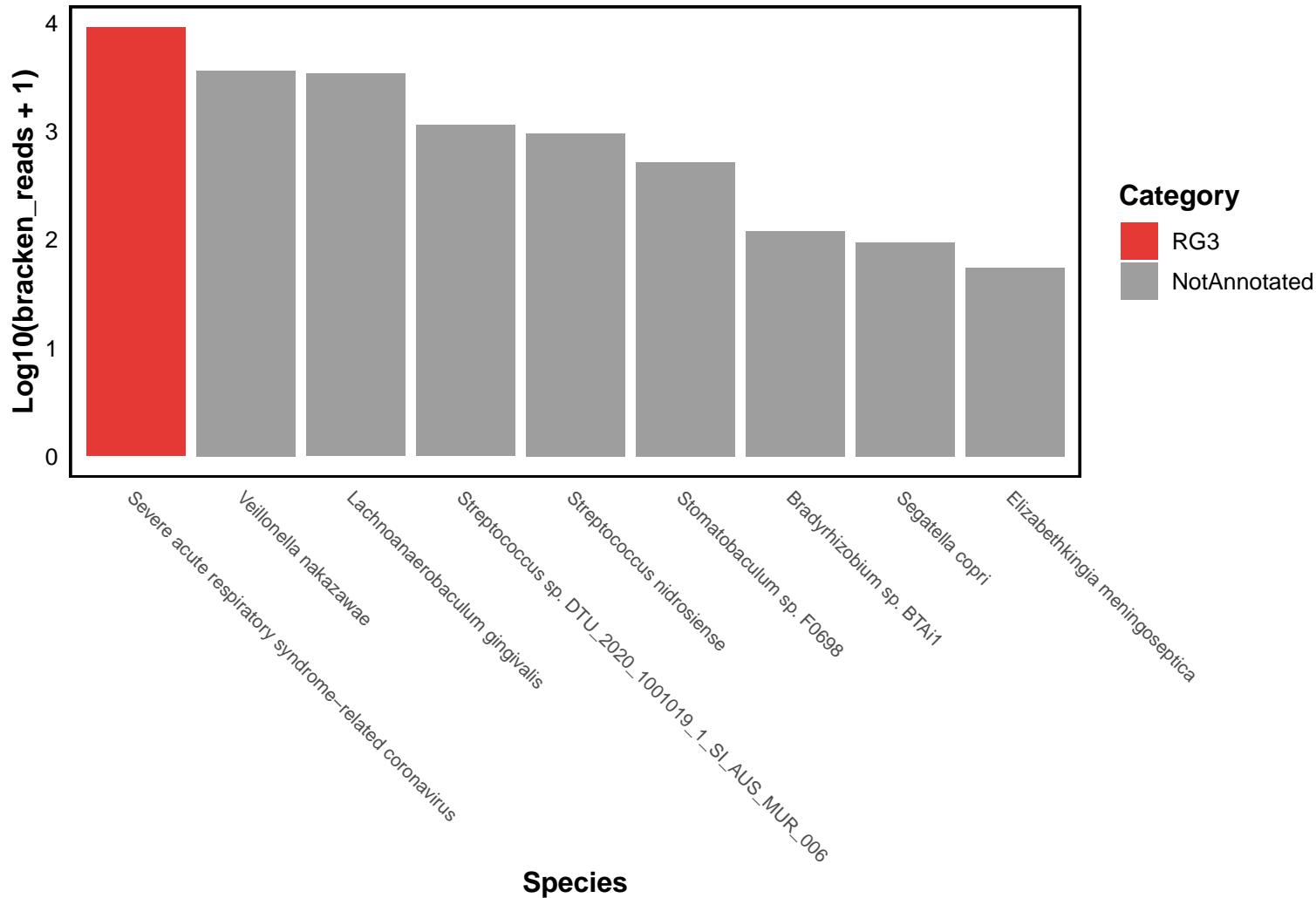
Species per Risk Group – W73007934 – Pathogens

Total species: 9



Species by Risk Group – W73007934 – Pathogens

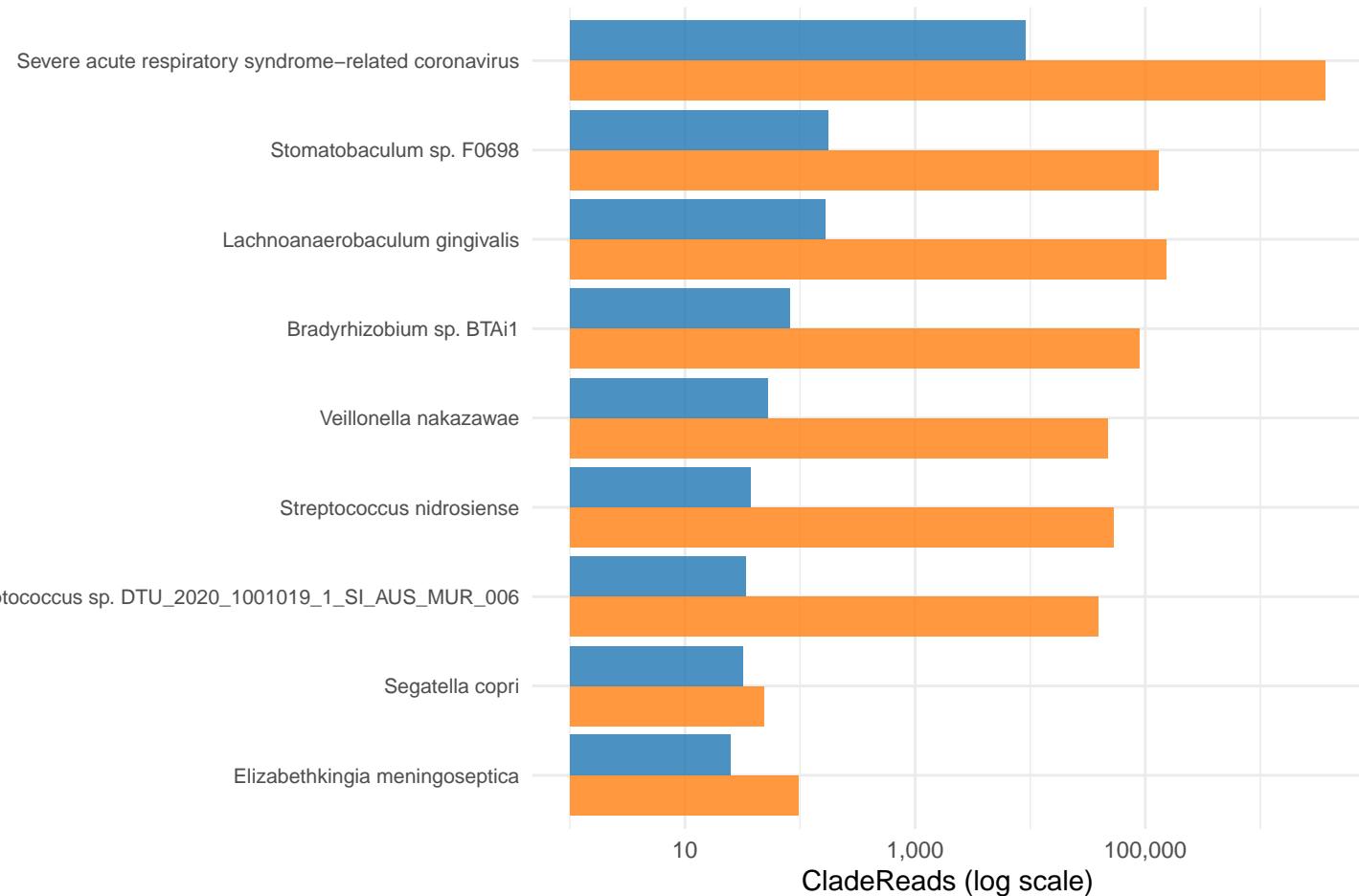
Top 9 species by Log10(bracken_reads + 1)



Pathogen Detection: Sample vs Batch Comparison

Sample: W73007934 | Top 15 pathogenic species by sample cladeR

Data Source Batch Mean Sample W73007934



Part 5: Pathogen Detection (RG3/4 Species) – W73109775

Pathogen detection analysis for sample W73109775:

Filtering criteria:

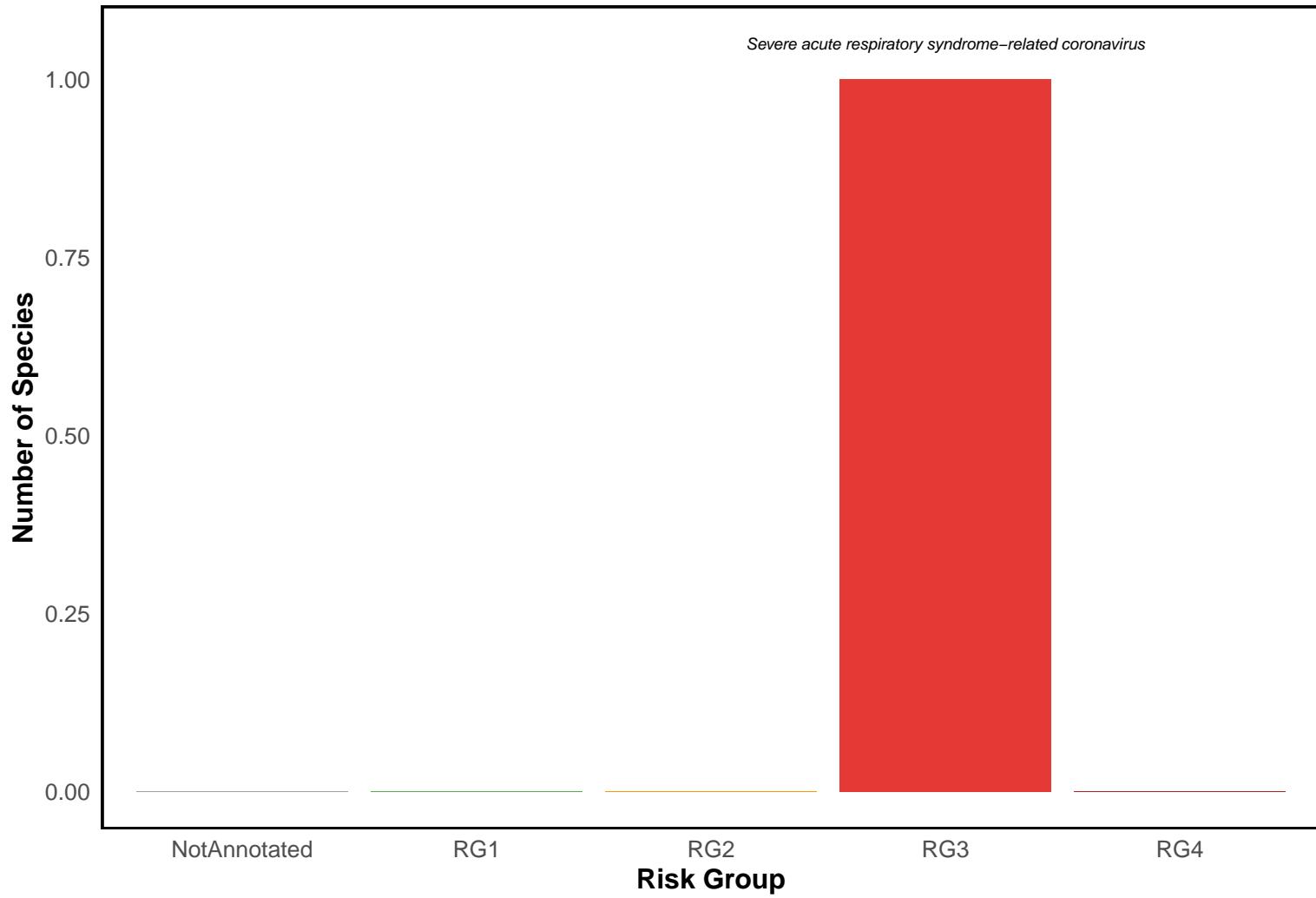
- Include: RG3, RG4 risk groups
- Exclude: RG1, RG2 risk groups
- Exclude: Species annotated as 'Microbiome' in HOMD.Category

Key findings:

- Total species in sample: 22
- Potential pathogenic species identified: 1
- Most abundant pathogen: Severe acute respiratory syndrome-related coronavirus
- Average pathogen reads: 1564

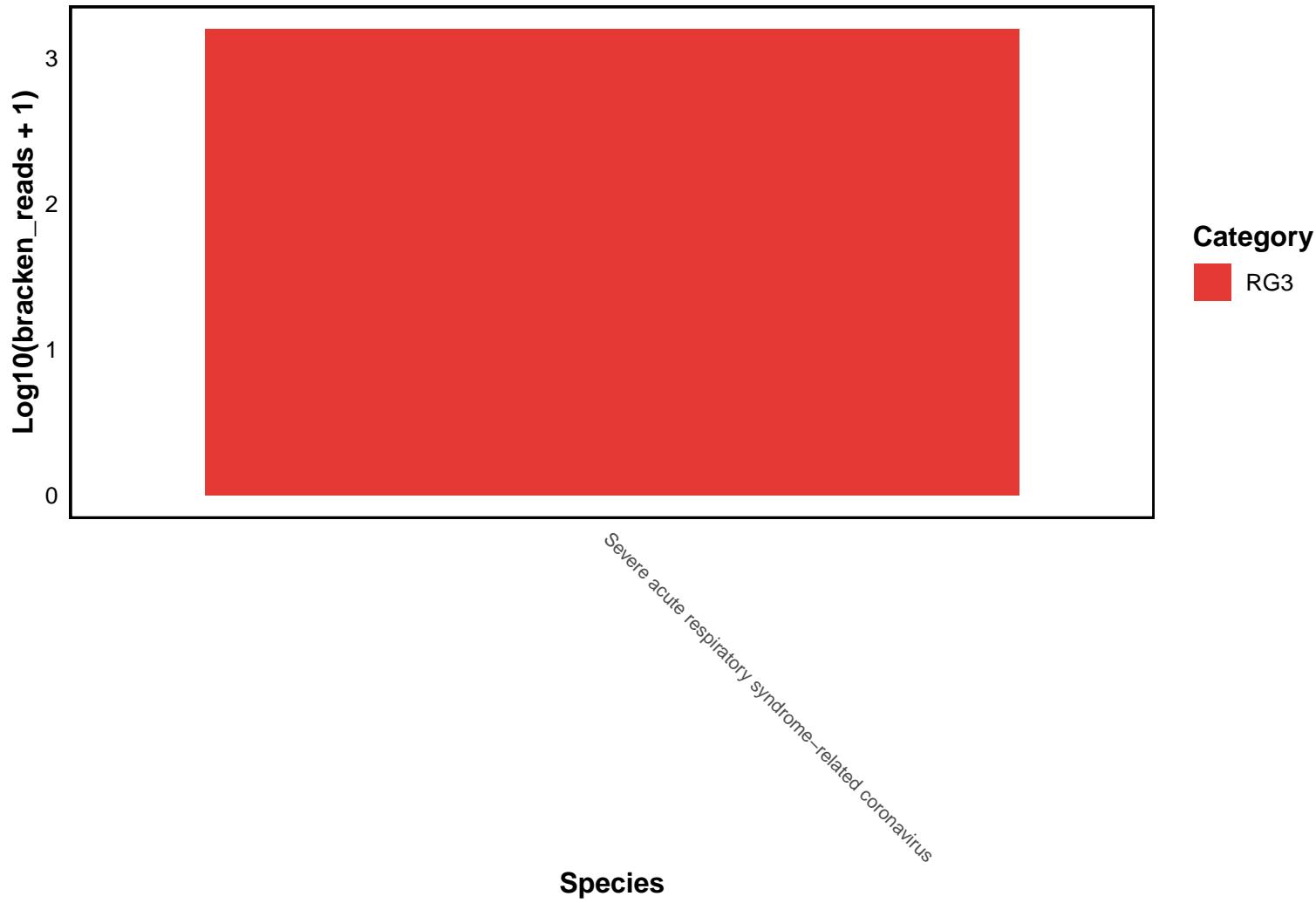
Species per Risk Group – W73109775 – Pathogens

Total species: 1



Species by Risk Group – W73109775 – Pathogens

Top 1 species by Log10(bracken_reads + 1)



Pathogen Detection: Sample vs Batch Comparison

Sample: W73109775 | Top 15 pathogenic species by sample cladeReads

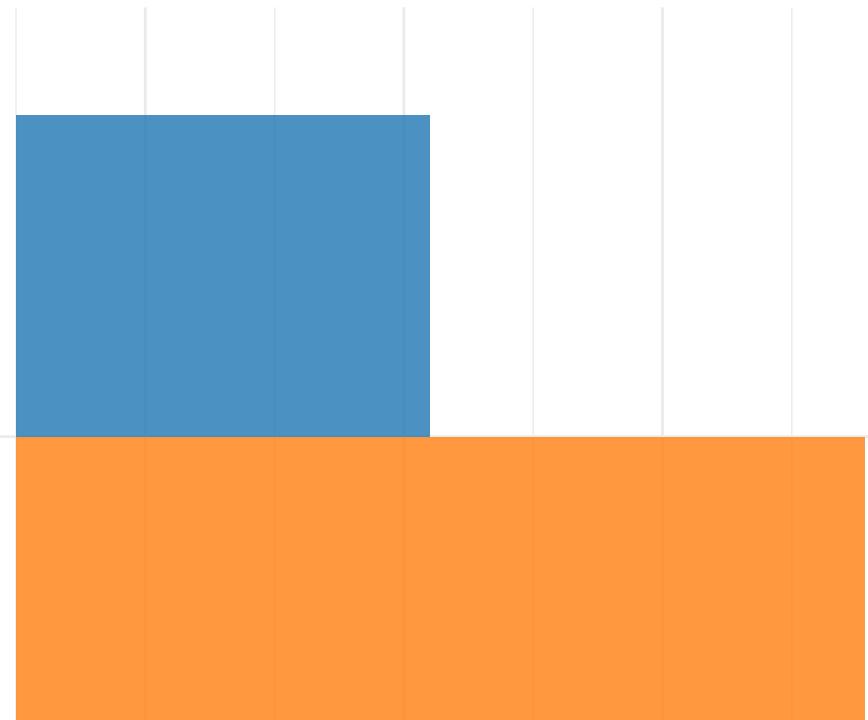
Data Source

Batch Mean

Sample W73109775

Species

Severe acute respiratory syndrome–related coronavirus



10

1,000

100,000

CladeReads (log scale)

Part 5: Pathogen Detection (RG3/4 Species) – W81802779

Pathogen detection analysis for sample W81802779:

Filtering criteria:

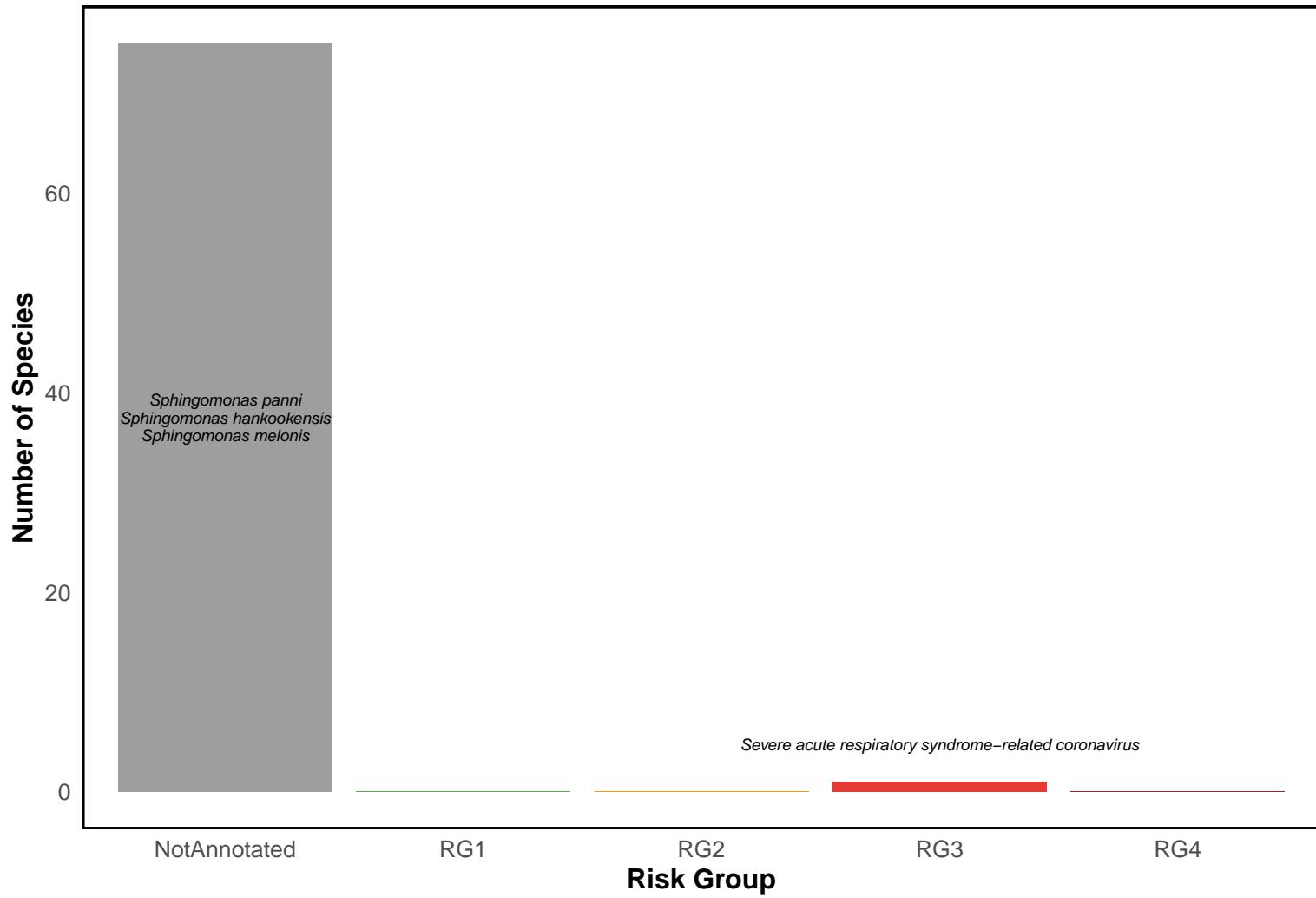
- Include: RG3, RG4 risk groups
- Exclude: RG1, RG2 risk groups
- Exclude: Species annotated as 'Microbiome' in HOMD.Category

Key findings:

- Total species in sample: 132
- Potential pathogenic species identified: 76
- Most abundant pathogen: Severe acute respiratory syndrome-related coronavirus
- Average pathogen reads: 9181.6

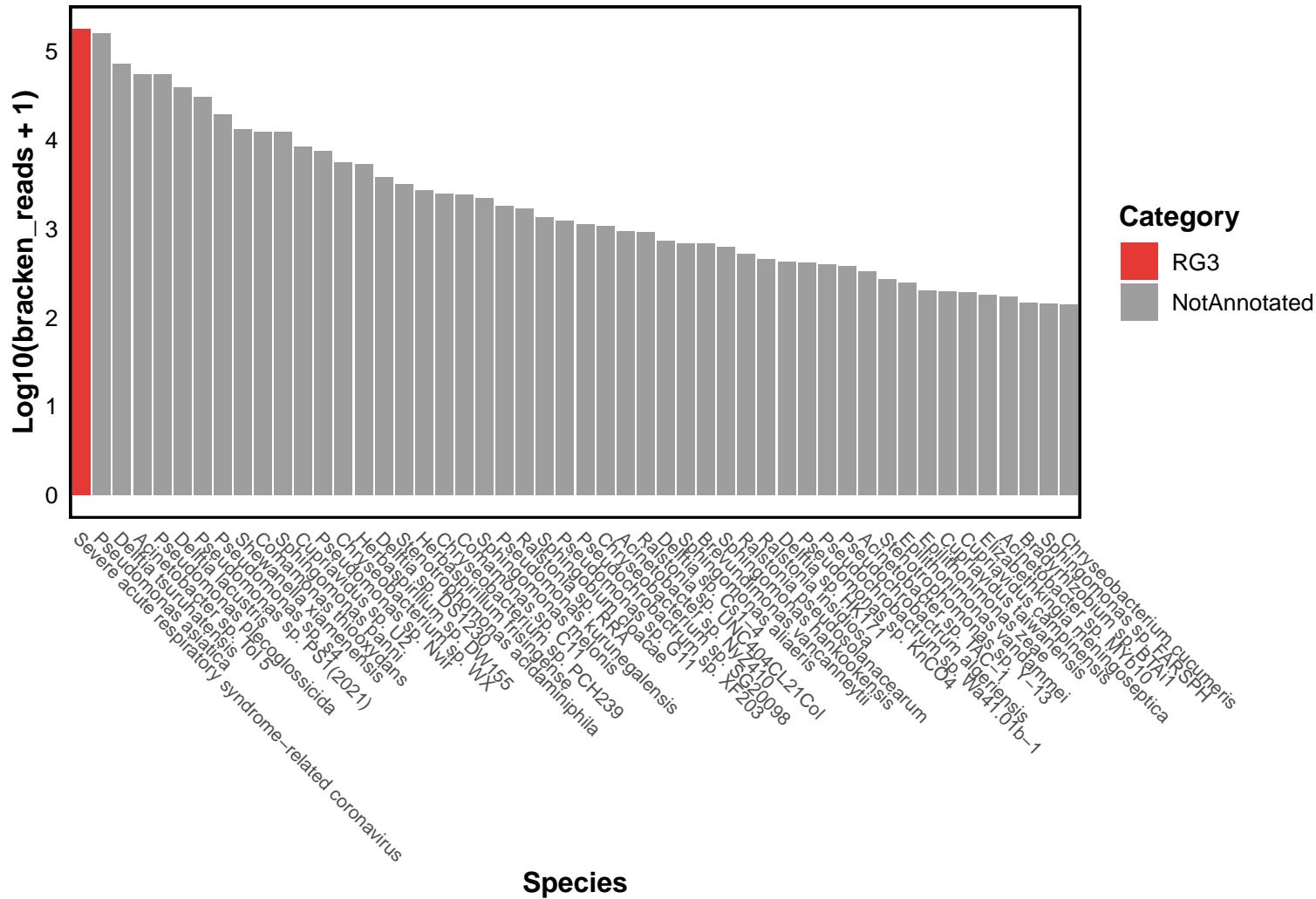
Species per Risk Group – W81802779 – Pathogens

Total species: 76



Species by Risk Group – W81802779 – Pathogens

Top 50 species by Log10(bracken_reads + 1)



Pathogen Detection: Sample vs Batch Comparison

Sample: W81802779 | Top 15 pathogenic species by sample cladeReads

Data Source



Batch Mean

Sample W81802779

Severe acute respiratory syndrome-related coronavirus



Pseudomonas plecoglossicida



Pseudomonas asiatica



Delftia tsuruhatensis



Comamonas thiooxydans



Acinetobacter sp. Tol 5



Sphingomonas panni



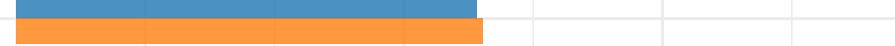
Cupriavidus sp. U2



Herbaspirillum sp. DW155



Delftia lacustris



Shewanella xiamenensis



Herbaspirillum frisingense



Sphingomonas melonis



Stenotrophomonas acidaminiphila



Ralstonia sp. RRA



10

1,000

100,000

CladeReads (log scale)

Species

Part 5: Pathogen Detection (RG3/4 Species) – W90303891

Pathogen detection analysis for sample W90303891:

Filtering criteria:

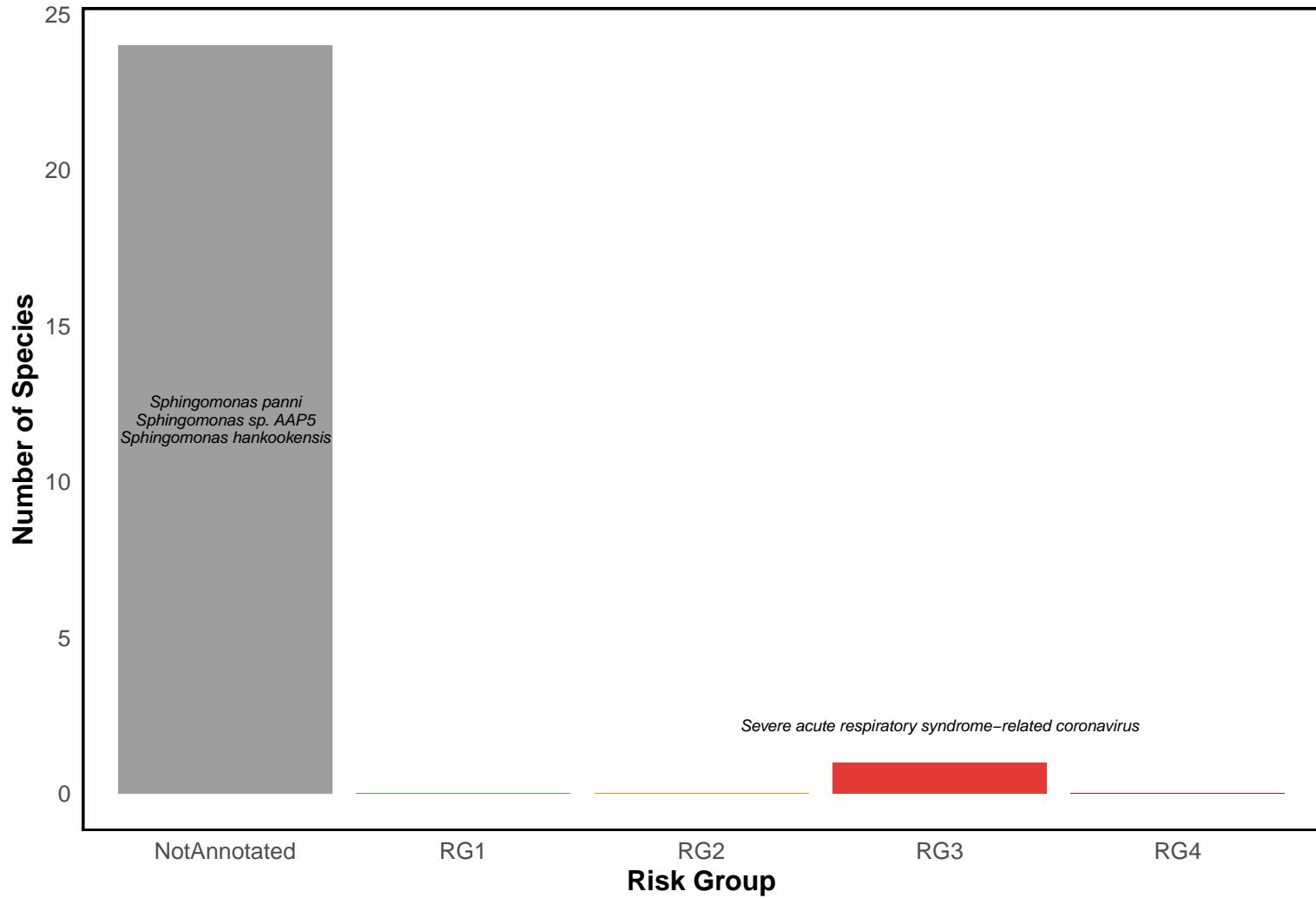
- Include: RG3, RG4 risk groups
- Exclude: RG1, RG2 risk groups
- Exclude: Species annotated as 'Microbiome' in HOMD.Category

Key findings:

- Total species in sample: 63
- Potential pathogenic species identified: 25
- Most abundant pathogen: Severe acute respiratory syndrome-related coronavirus
- Average pathogen reads: 1571745.3

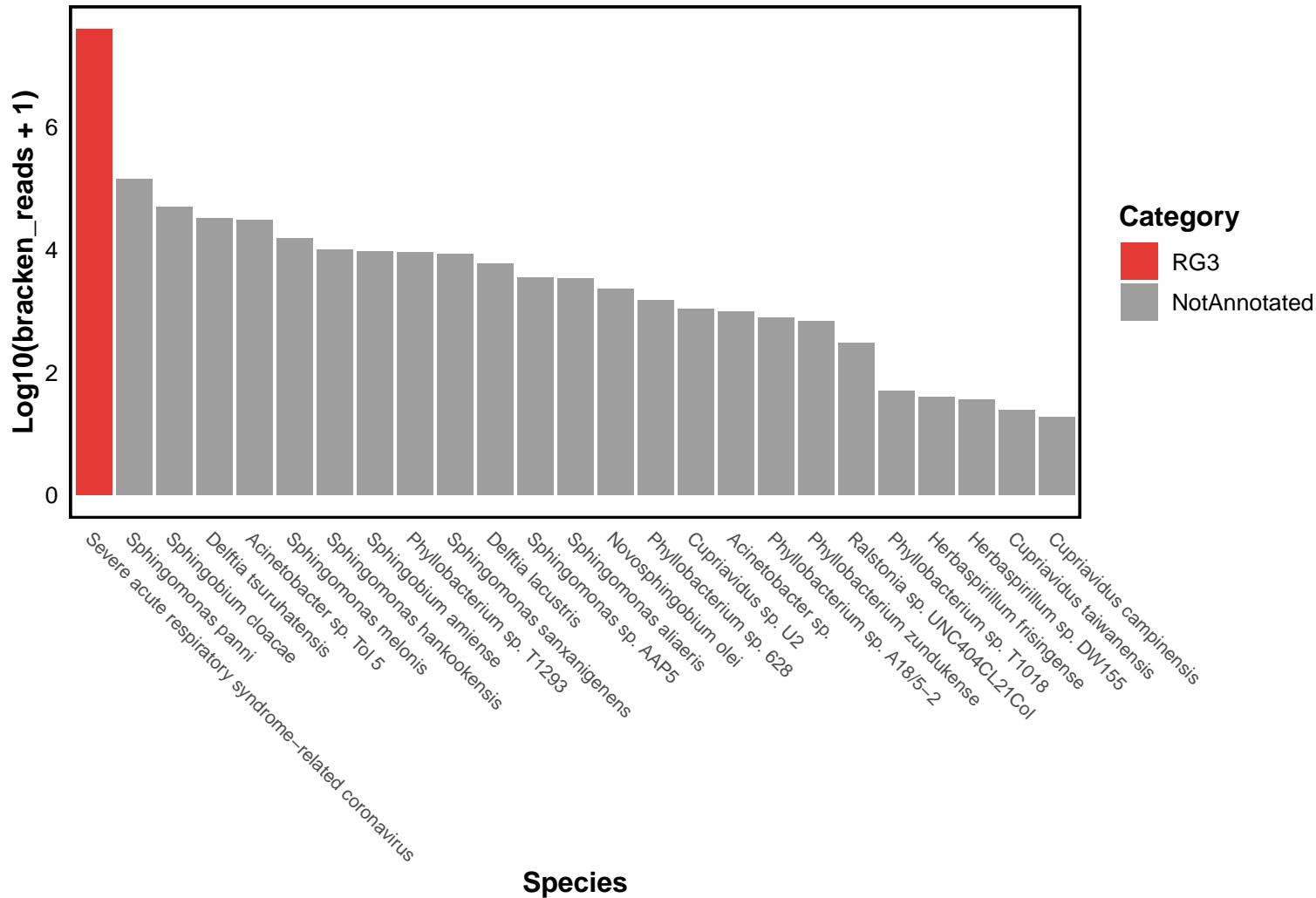
Species per Risk Group – W90303891 – Pathogens

Total species: 25



Species by Risk Group – W90303891 – Pathogens

Top 25 species by Log10(bracken_reads + 1)



Pathogen Detection: Sample vs Batch Comparison

Sample: W90303891 | Top 15 pathogenic species by sample cladeReads

Data Source

Batch Mean

Sample W90303891

Severe acute respiratory syndrome-related coronavirus

Sphingomonas panni

Sphingobium cloacae

Sphingomonas hankookensis

Sphingomonas sanxanigenens

Sphingomonas melonis

Sphingobium amiense

Sphingomonas aliaeris

Sphingomonas sp. AAP5

Phyllobacterium sp. T1293

Novosphingobium olei

Acinetobacter sp. Tol 5

Delftia tsuruhatensis

Acinetobacter sp.

Phyllobacterium sp. 628

10

1,000

100,000

10,000,000

CladeReads (log scale)

Species

Part 5: Pathogen Detection (RG3/4 Species) – W90504037

Pathogen detection analysis for sample W90504037:

Filtering criteria:

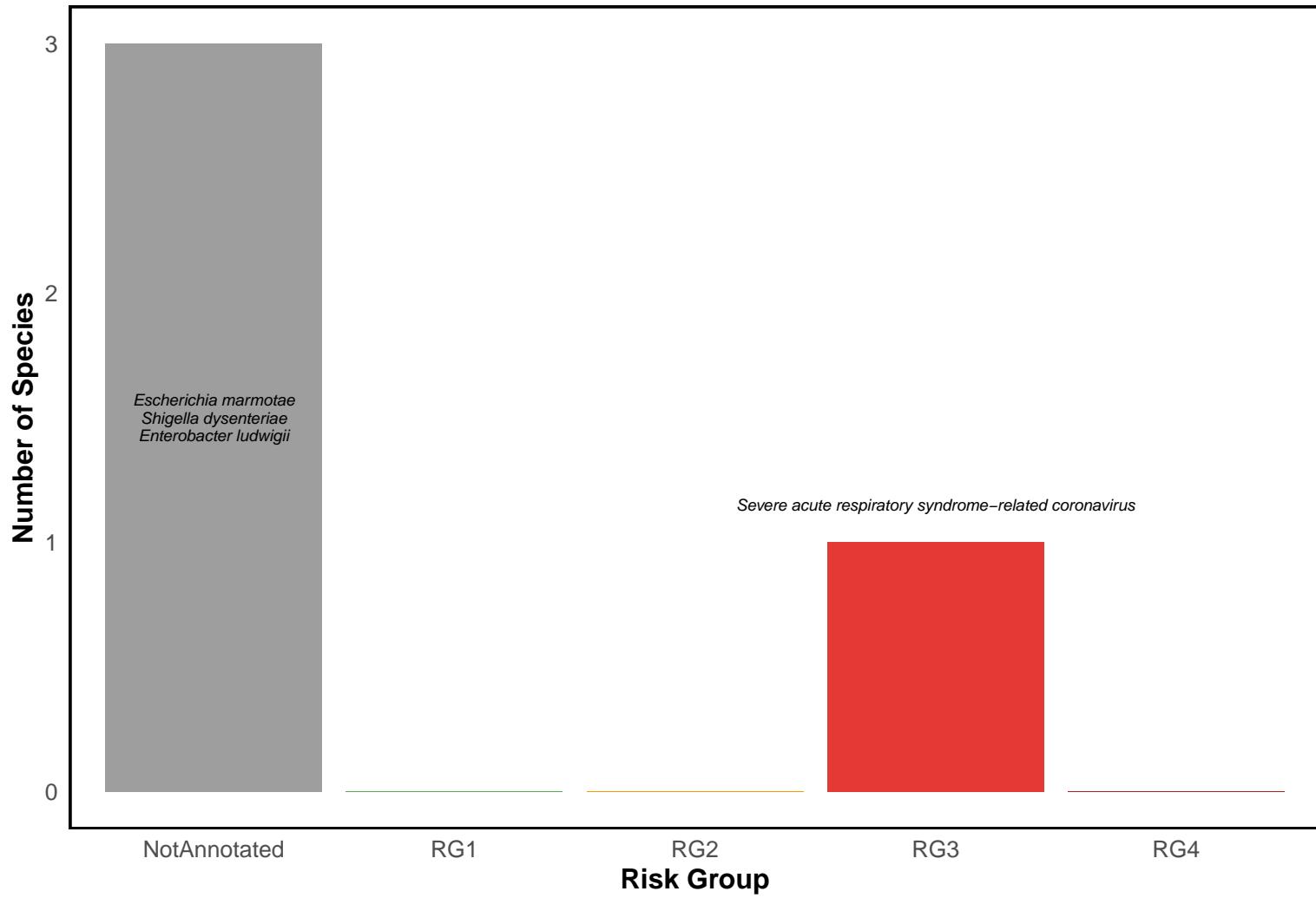
- Include: RG3, RG4 risk groups
- Exclude: RG1, RG2 risk groups
- Exclude: Species annotated as 'Microbiome' in HOMD.Category

Key findings:

- Total species in sample: 30
- Potential pathogenic species identified: 4
- Most abundant pathogen: *Shigella dysenteriae*
- Average pathogen reads: 50176.2

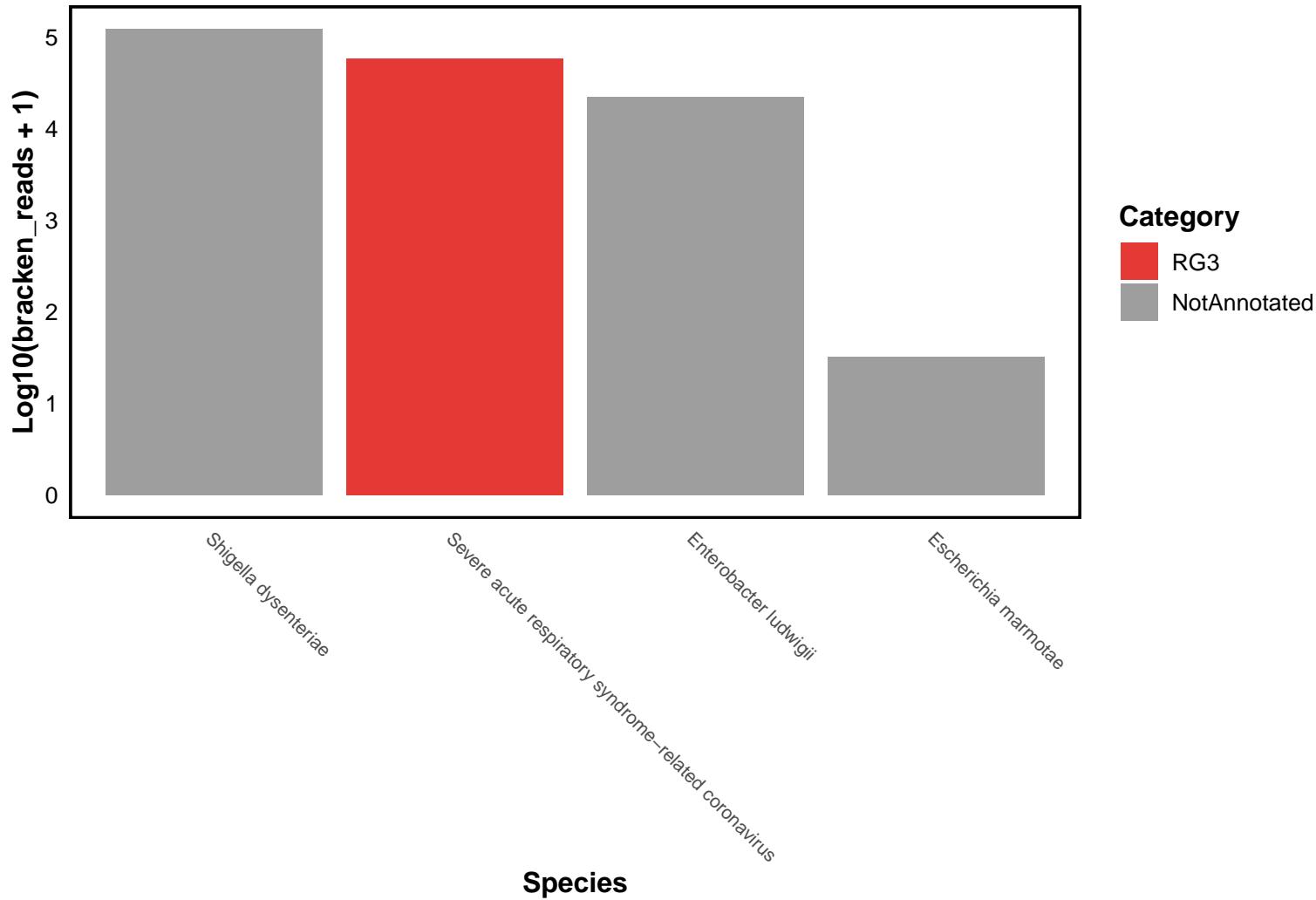
Species per Risk Group – W90504037 – Pathogens

Total species: 4



Species by Risk Group – W90504037 – Pathogens

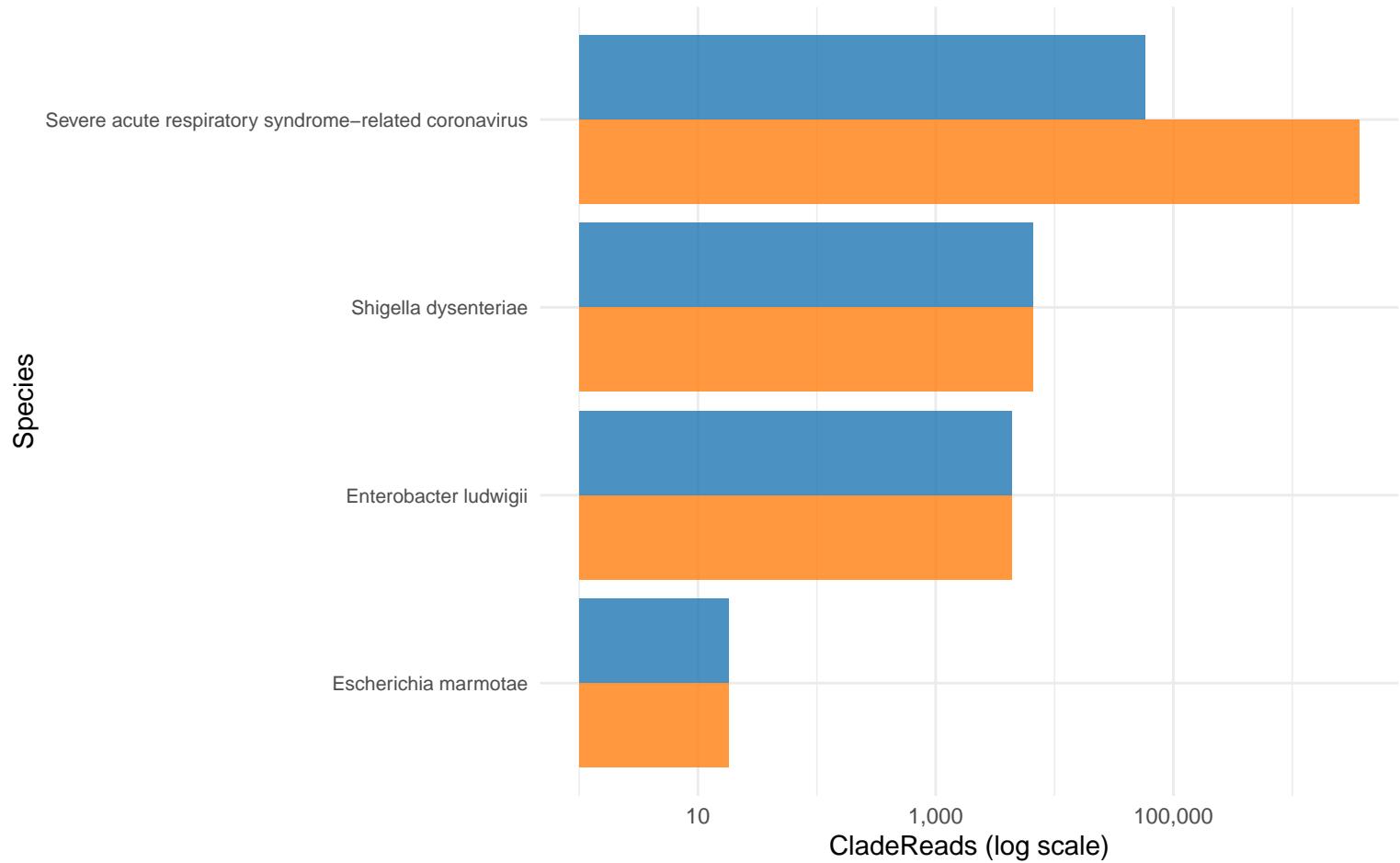
Top 4 species by Log10(bracken_reads + 1)



Pathogen Detection: Sample vs Batch Comparison

Sample: W90504037 | Top 15 pathogenic species by sample cladeReads

Data Source Batch Mean Sample W90504037



Part 5: Pathogen Detection (RG3/4 Species) – X01703004

Pathogen detection analysis for sample X01703004:

Filtering criteria:

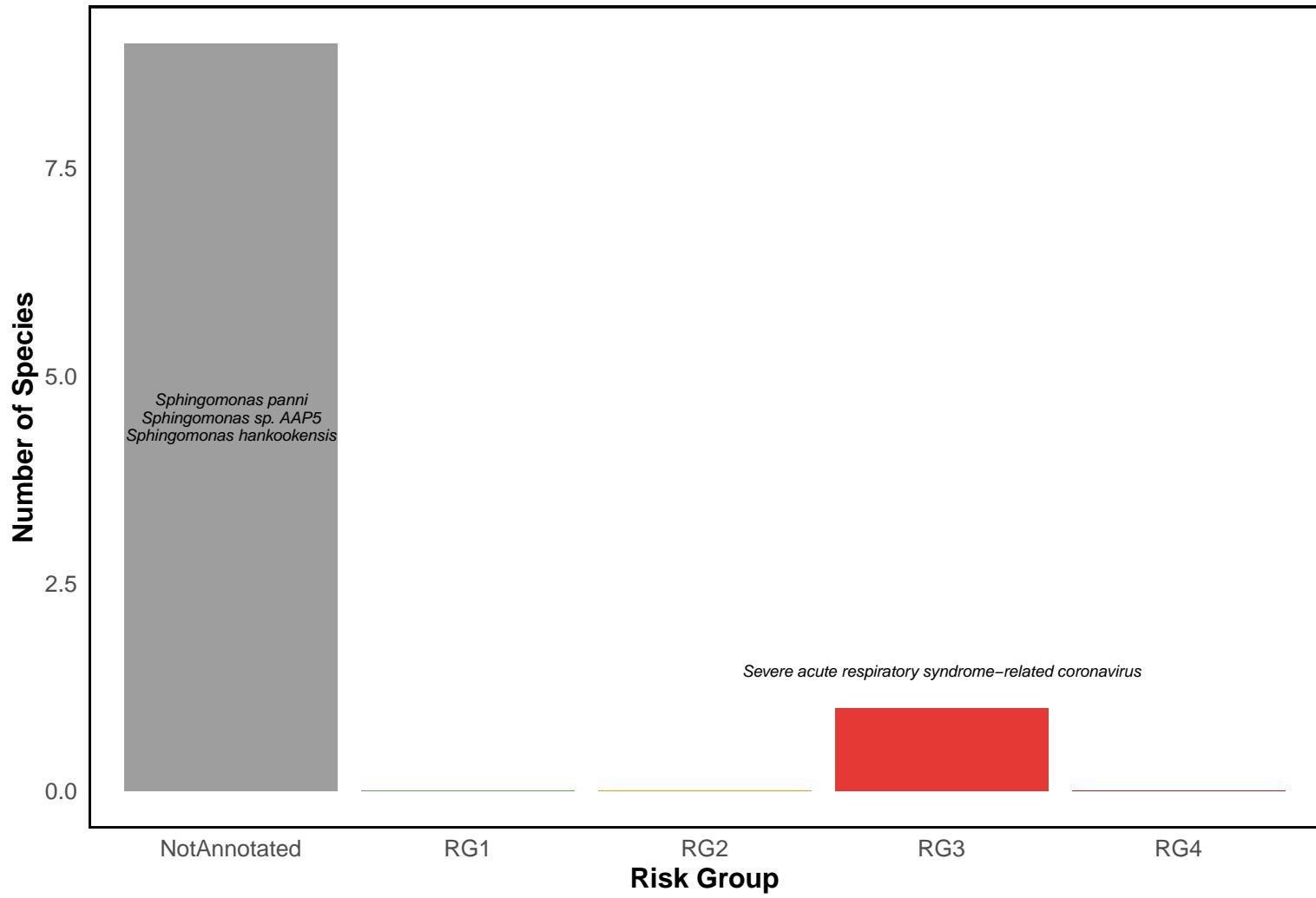
- Include: RG3, RG4 risk groups
- Exclude: RG1, RG2 risk groups
- Exclude: Species annotated as 'Microbiome' in HOMD.Category

Key findings:

- Total species in sample: 28
- Potential pathogenic species identified: 10
- Most abundant pathogen: *Bacillus cereus*
- Average pathogen reads: 14869.1

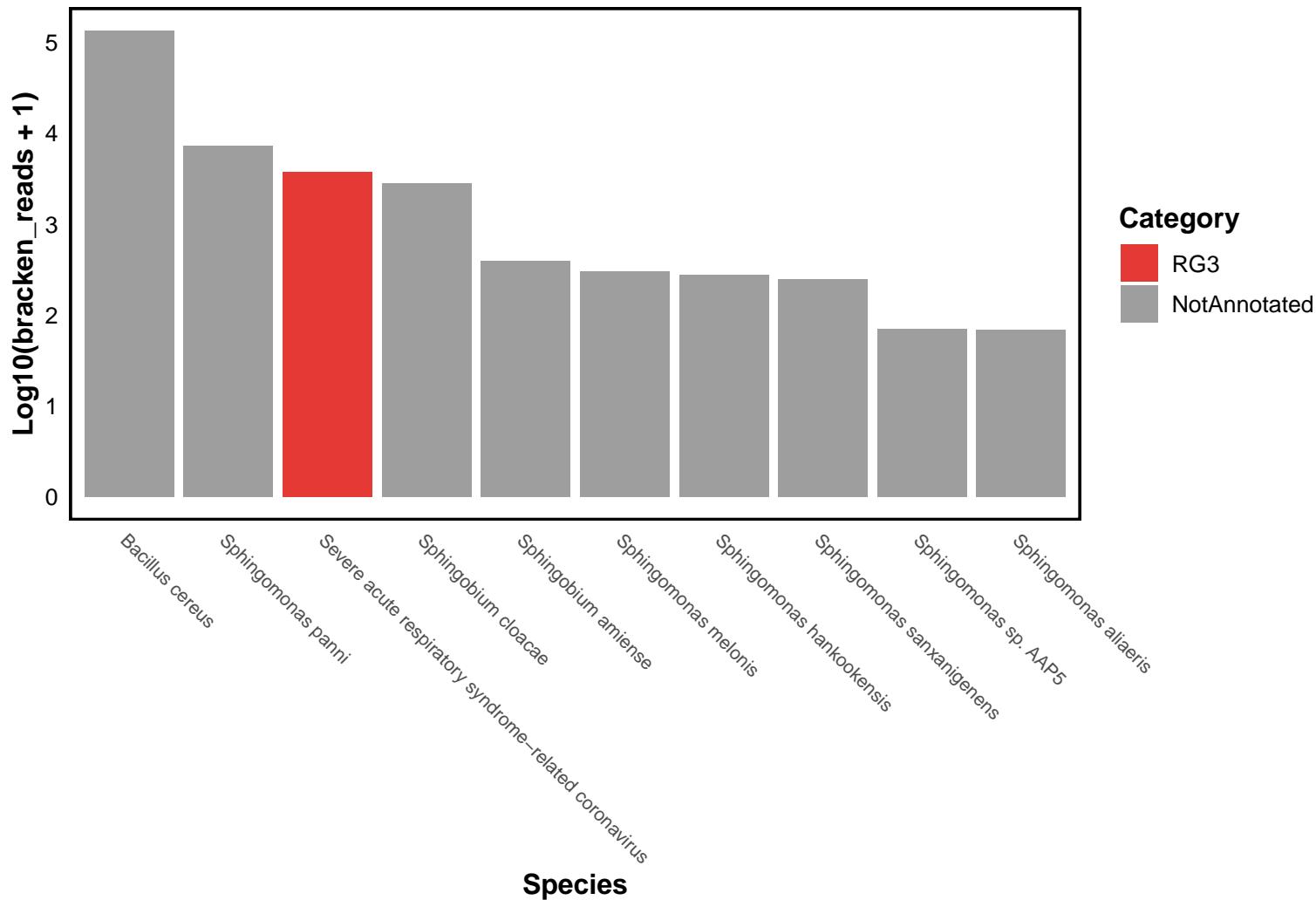
Species per Risk Group – X01703004 – Pathogens

Total species: 10



Species by Risk Group – X01703004 – Pathogens

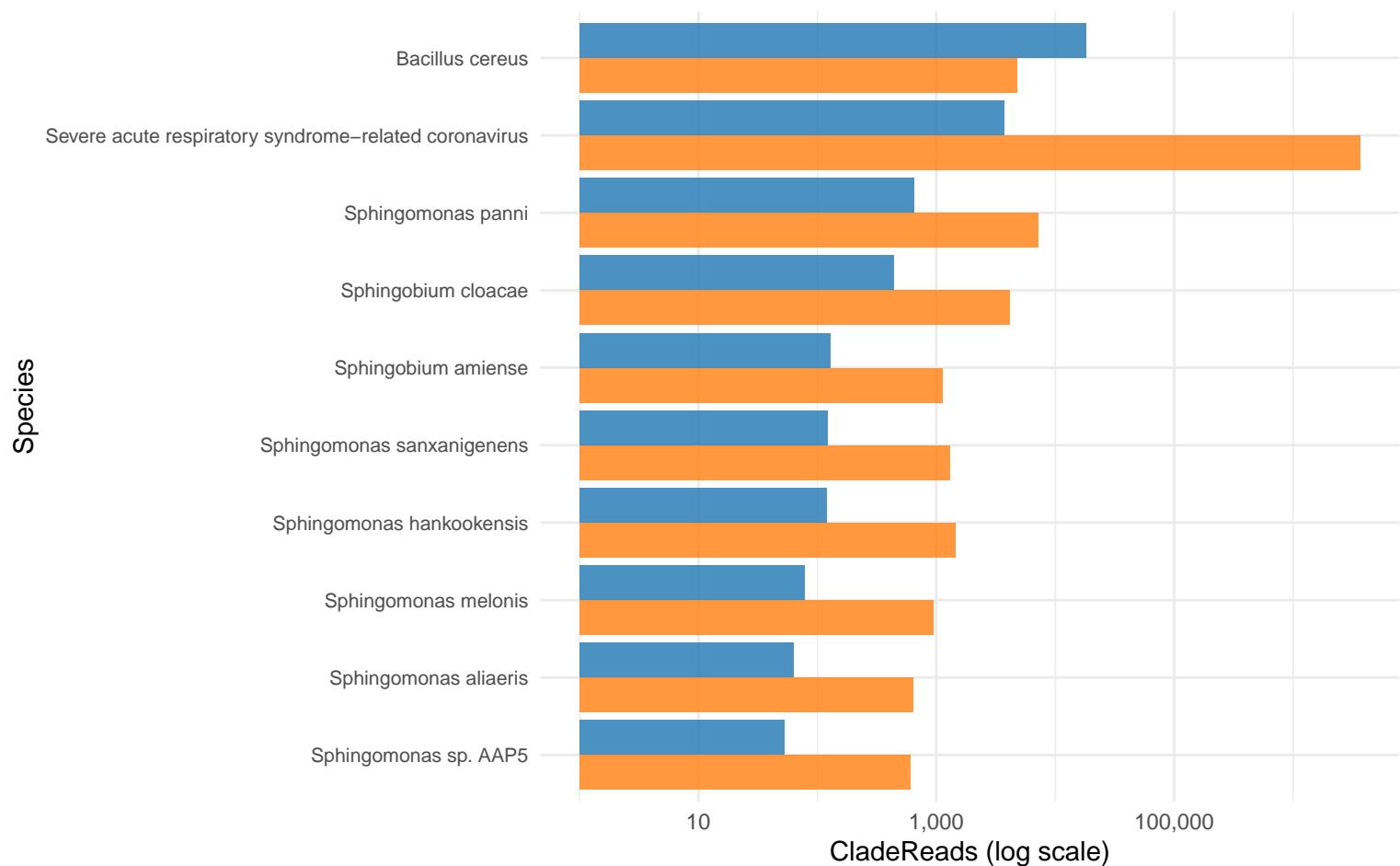
Top 10 species by Log10(bracken_reads + 1)



Pathogen Detection: Sample vs Batch Comparison

Sample: X01703004 | Top 15 pathogenic species by sample cladeReads

Data Source Batch Mean Sample X01703004



Part 5: Pathogen Detection (RG3/4 Species) – X22106916

Pathogen detection analysis for sample X22106916:

Filtering criteria:

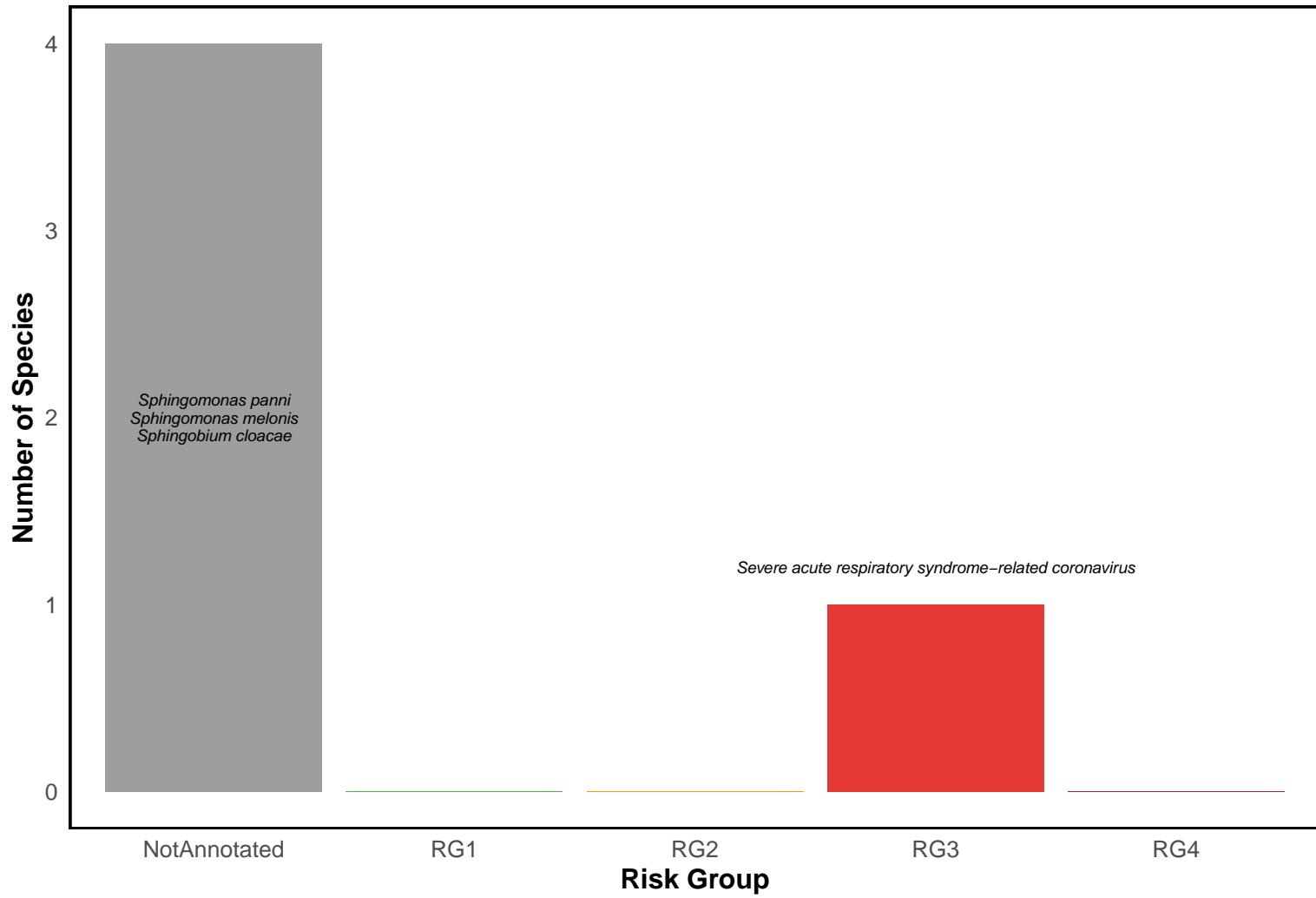
- Include: RG3, RG4 risk groups
- Exclude: RG1, RG2 risk groups
- Exclude: Species annotated as 'Microbiome' in HOMD.Category

Key findings:

- Total species in sample: 15
- Potential pathogenic species identified: 5
- Most abundant pathogen: Severe acute respiratory syndrome-related coronavirus
- Average pathogen reads: 39614.6

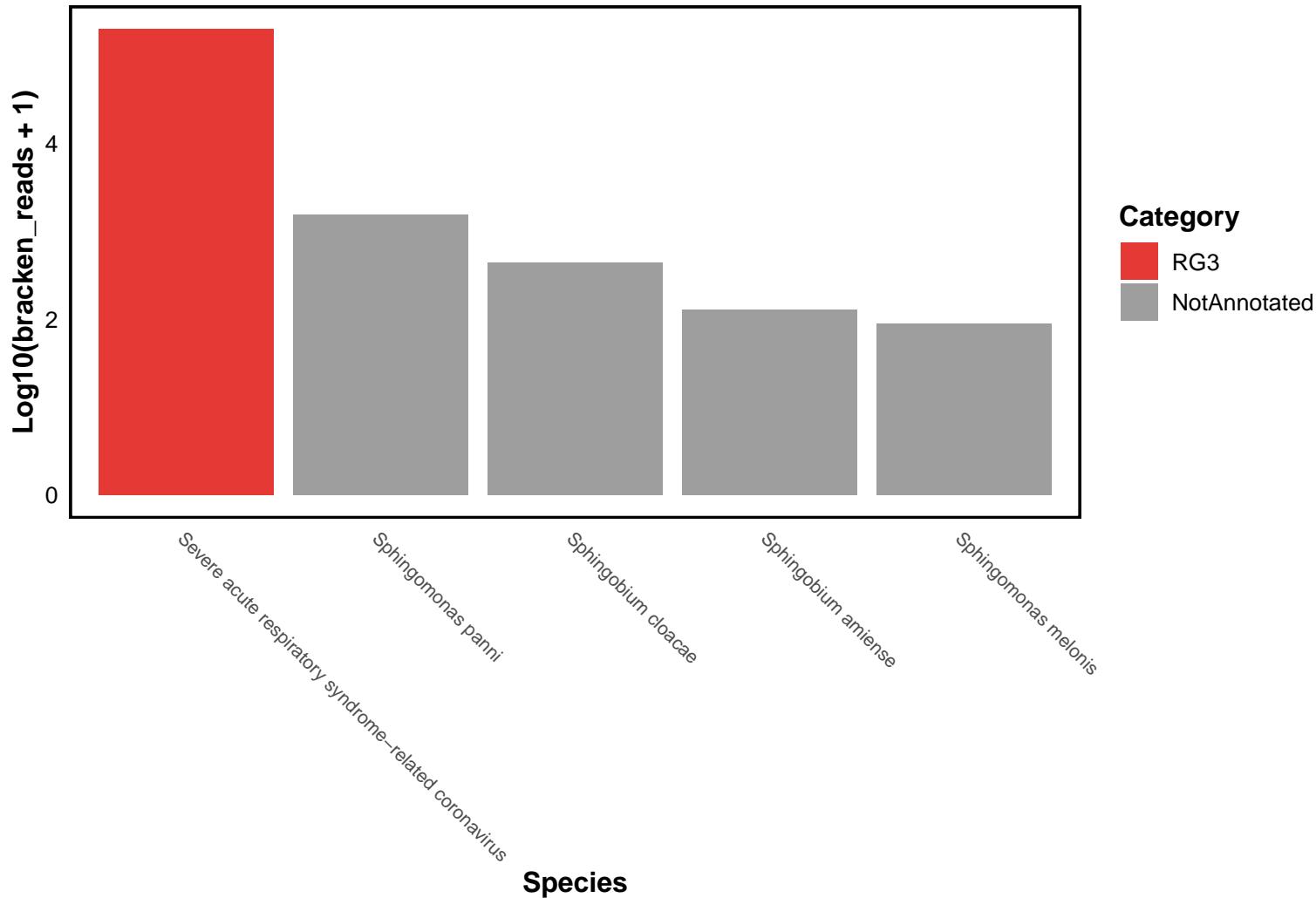
Species per Risk Group – X22106916 – Pathogens

Total species: 5



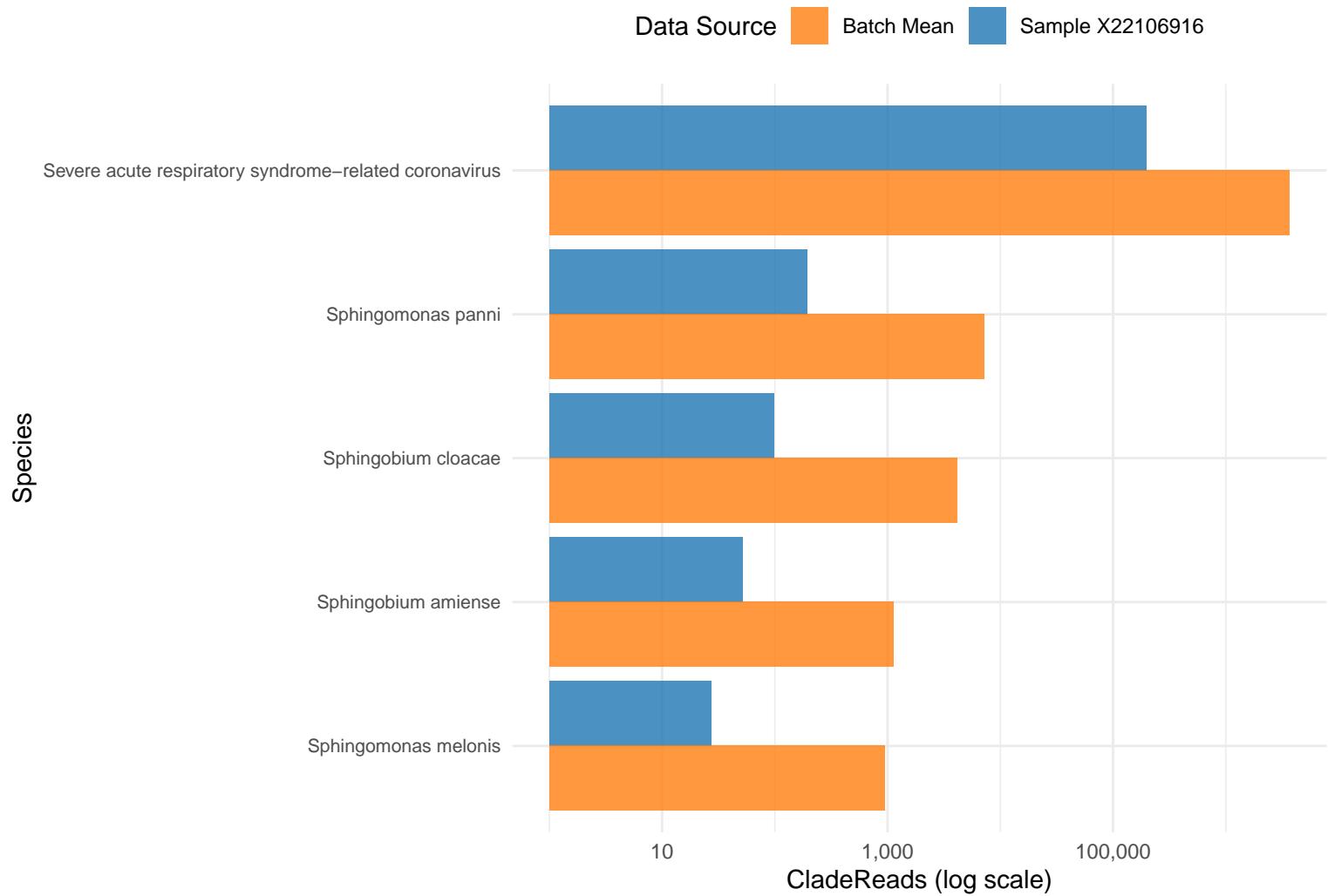
Species by Risk Group – X22106916 – Pathogens

Top 5 species by Log10(bracken_reads + 1)



Pathogen Detection: Sample vs Batch Comparison

Sample: X22106916 | Top 15 pathogenic species by sample cladeReads



Part 5: Pathogen Detection (RG3/4 Species) – X30306045

Pathogen detection analysis for sample X30306045:

Filtering criteria:

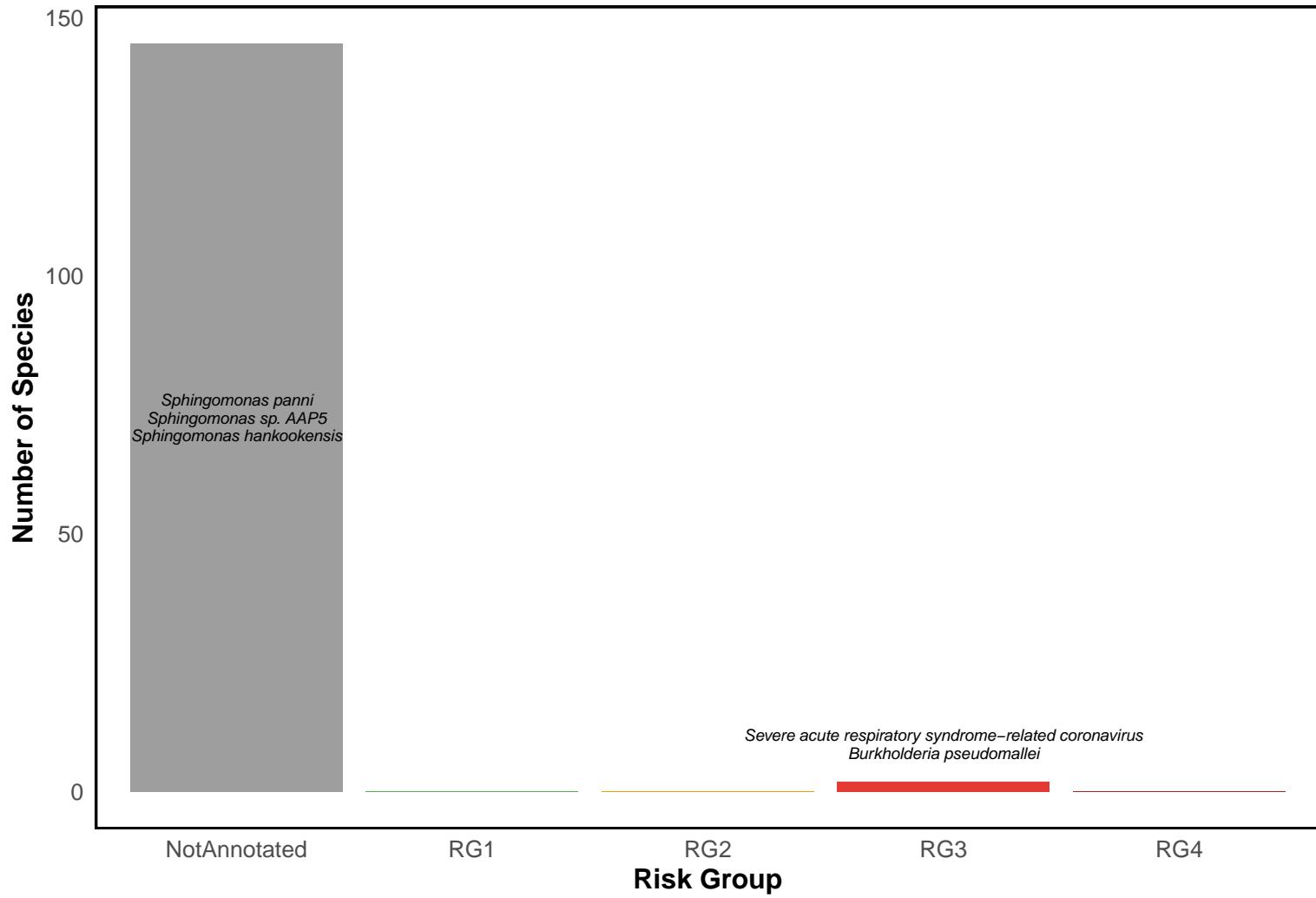
- Include: RG3, RG4 risk groups
- Exclude: RG1, RG2 risk groups
- Exclude: Species annotated as 'Microbiome' in HOMD.Category

Key findings:

- Total species in sample: 224
- Potential pathogenic species identified: 147
- Most abundant pathogen: Pseudomonas sp. PS1(2021)
- Average pathogen reads: 26834.1

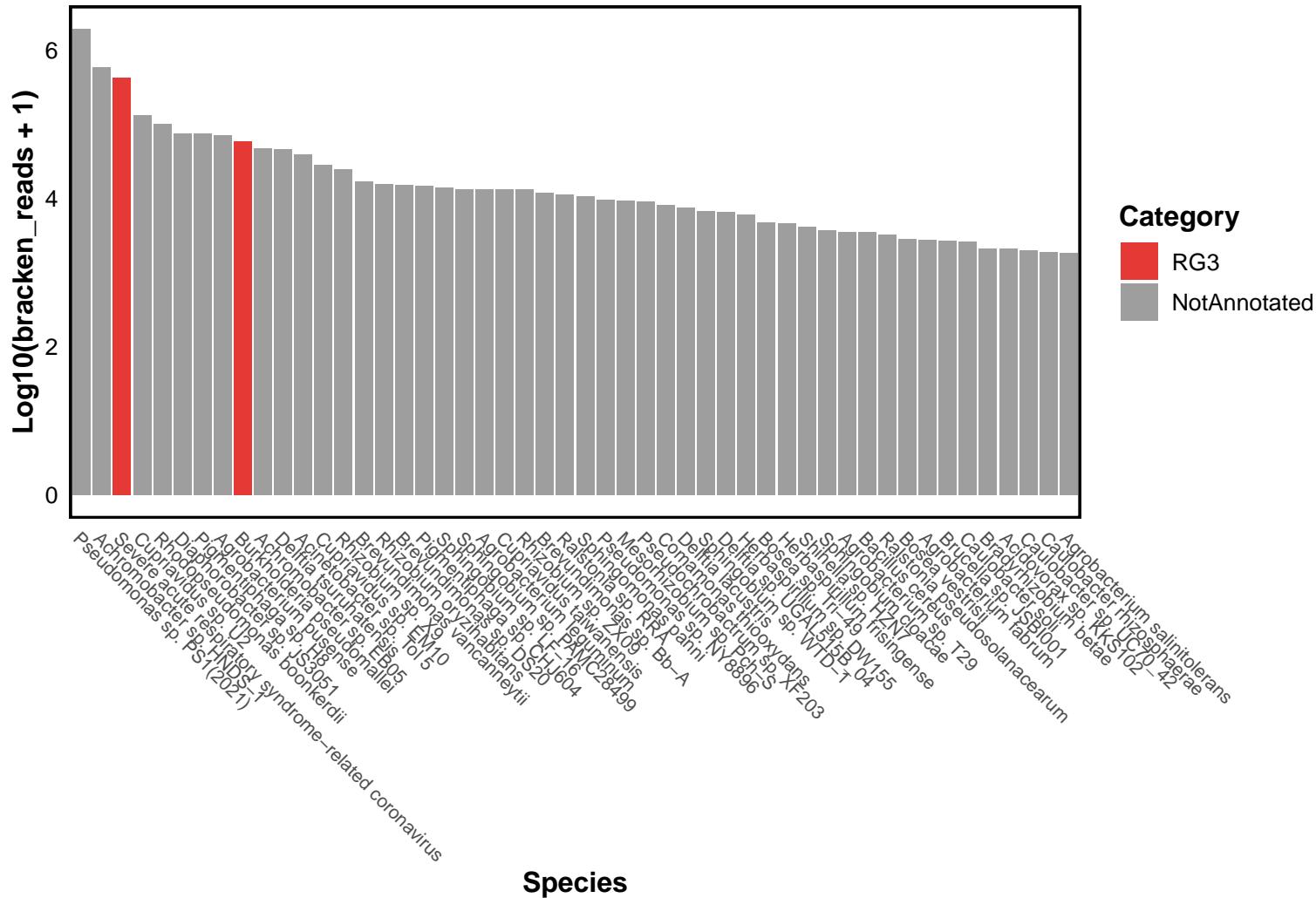
Species per Risk Group – X30306045 – Pathogens

Total species: 147



Species by Risk Group – X30306045 – Pathogens

Top 50 species by Log10(bracken_reads + 1)



Pathogen Detection: Sample vs Batch Comparison

Sample: X30306045 | Top 15 pathogenic species by sample cladeReads

Data Source

Batch Mean

Sample X30306045

Severe acute respiratory syndrome-related coronavirus

Rhodopseudomonas boonkerdii

Pseudomonas sp. PS1(2021)

Pigmentiphaga sp. H8

Cupriavidus sp. EM10

Cupriavidus sp. U2

Mesorhizobium sp. Pch-S

Ralstonia sp. RRA

Cupriavidus taiwanensis

Brevundimonas sp. DS20

Acinetobacter sp. Tol 5

Brevundimonas sp. Bb-A

Delftia tsuruhatensis

Pigmentiphaga sp. CHJ604

Sphingobium sp. PAMC28499

10

1,000

100,000

CladeReads (log scale)