| ID Species | METAnnotatorX2 | | | | | METAnnotatorX | | | | | Kraken 2 | | | | | MetaPhlan 3 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Dog Faeces | Cheese | Cow Litter | Sputum | Vaginal Swab | Dog Faeces | Cheese | Cow Litter | Sputum | Vaginal Swab | Dog Faeces | Cheese | Cow Litter | Sputum | Vaginal Swab | Dog Faeces | Cheese | Cow Litter | Sputum | Vaginal Swab |
| Number of Retrieved species | 10 | 6 | 27 | 24 | 12 | 13 | 2 | 11 | 21 | 17 | 23 | 1 | 8 | 4 | 2 | 3 | 6 | 6 | 4 | 3 |
| Lactococcus lactis | | 89.04% | | | | | 74.36% | | | | | 84.70% | | | | | 73.61% | | | |
| Homo sapiens | | | | | | | | | 1.46% | 2.36% | 5.29% | | 1.38% | 83.68% | 93.63% | | | | | |
| Prevotella copri | 36.88% | | | | | 24.26% | | | | | | | | | | 92.86% | | | | |
| Staphylococcus xylosus | | | 5.56% | | | | | 10.12% | | | | | 21.99% | | | | | 31.26% | | |
| Lactobacillus iners | | | | | 10.20% | | | | | 5.66% | | | | | | | | | | 43.30% |
| Neisseria flavescens | | | | 0.69% | | | | | 0.63% | | | | | | | | | | 57.01% | |
| Geoglossum unknown species | | | | 22.57% | 28.52% | | | | | | | | | | | | | | | |
| Staphylococcus arlettae | | | 11.09% | | | | | 2.24% | | | | | | | | | | 35.53% | | |
| Human endogenous retrovirus K | | | | | | | | | | | | | | | | | | | | 40.23% |
| Saccharopolyspora rectivirgula | | | 9.78% | | | | | 6.80% | | | | | | | | | | 18.96% | | |
| Lactobacillus jensenii | | | | | | | | | | 10.43% | | | | | 4.85% | | | | | 16.47% |
| Scortechinia unknown species | | | | 12.82% | 16.08% | | | | | | | | | | | | | | | |
| Bacteroides unknown species | 16.48% | | | 0.76% | | 4.27% | | | | | | | | | | | | | | |
| Porphyromonas somerae | | | | | | | | | 1.87% | | | | | | | | | | 16.62% | |
| Streptococcus mitis | | | | 2.64% | | | | | 1.17% | | | | | 0.88% | | | | | 12.27% | |
| Lactococcus virus bIL67 | | | | | | | | | | | | | | | | | 15.15% | | | |
| Prevotella unknown species | 9.19% | | | 4.54% | | | | | 1.29% | | | | | | | | | | | |
| Corynebacterium stationis | | | 3.11% | | | | | 2.35% | | | | | 4.66% | | | | | 4.54% | | |
| Lactobacillus mulieris | | | | | 14.25% | | | | | | | | | | | | | | | |
| Haemophilus sp HMSC71H05 | | | | | | | | | | | | | | | | | | | 14.11% | |
| Virus Poxviridae unknown species | | | | 5.43% | 6.23% | | | | 0.98% | 1.38% | | | | | | | | | | |
| Phocaeicola unknown species | 13.00% | | | | | | | | | | | | | | | | | | | |
| Echinosphaeria unknown species | | | | 5.15% | 6.23% | | | | | | | | | | | | | | | |
| Corynebacterium unknown species | | | 9.79% | | | | | 1.50% | | | | | | | | | | | | |
| Salmonella enterica | | | | | | | | | 4.30% | 6.80% | | | | | | | | | | |
| Lactobacillus diolivorans | | 4.85% | | | | | 3.54% | | | | | | | | | | 2.20% | | | |
| Faecalibacterium prausnitzii | | | | | | 3.10% | | | | | 7.40% | | | | | | | | | |
| Staphylococcus pseudoxylosus | | | 10.05% | | | | | | | | | | | | | | | | | |
| Bacteroides plebeius | | | | | | 4.56% | | | | | | | | | | 5.22% | | | | |
| Staphylococcus unknown species | | | 5.15% | | | | | 4.59% | | | | | | | | | | | | |
| Weissella hellenica | | | 2.70% | | | | | 2.03% | | | | | | | | | | 4.88% | | |
| Hemileia unknown species | | | 9.29% | | | | | | | | | | | | | | | | | |
| Mycobacterium unknown species | | | | | | | | | 3.13% | 4.66% | | | | | | | | | | |
| Bacteroides vulgatus | | | | | | 1.18% | | | | | 6.57% | | | | | | | | | |
| Fusobacterium unknown species | 7.56% | | | | | | | | | | | | | | | | | | | |
| Escherichia coli | | | | | | | | | 2.95% | 4.40% | | | | | | | | | | |
| Haemophilus parainfluenzae | | | | 3.91% | | | | | 1.47% | | | | | 1.90% | | | | | | |
| Streptococcus pneumoniae | | | | | | | | | 3.02% | 4.14% | | | | | | | | | | |
| Bacteroides coprocola | | | | | | 4.78% | | | | | | | | | | 1.92% | | | | |
| Prevotella melaninogenica | | | | 2.27% | | | | | 1.35% | | 1.54% | | | 1.43% | | | | | | |
| Bertia unknown species | | | | 2.91% | 3.39% | | | | | | | | | | | | | | | |
| Pasteurella unknown species | | | | 2.57% | 3.52% | | | | | | | | | | | | | | | |
| Paenibacillus odorifer | | | | | | | | | 2.32% | 3.53% | | | | | | | | | | |
| Plasmodium unknown species | | | | 2.51% | 3.09% | | | | | | | | | | | | | | | |
| Chaetosphaerella unknown species | | | | 2.40% | 2.90% | | | | | | | | | | | | | | | |
| Neisseria subflava | | | | 3.27% | | | | | | | | | | 1.83% | | | | | | |
| Porphyromonas unknown species | | | | 3.70% | | | | | 1.39% | | | | | | | | | | | |
| Bacteroides salanitronis | | | | | | 0.92% | | | | | 4.15% | | | | | | | | | |
| Sulfolobus acidocaldarius | | | | | | | | | 1.98% | 2.90% | | | | | | | | | | |
| Salmonella virus FelixO1 | | | | | | | | | | | | | | | | | | 4.84% | | |
| Tympanopsis unknown species | | | | 2.28% | 2.56% | | | | | | | | | | | | | | | |
| Phocaeicola coprocola | 4.57% | | | | | | | | | | | | | | | | | | | |
| Bacteroides fragilis | | | | | | 1.15% | | | | | 3.29% | | | | | | | | | |
| Halolamina sediminis | | | | | | | | | 3.49% | 0.84% | | | | | | | | | | |
| Phocaeicola plebeius | 3.90% | | | | | | | | | | | | | | | | | | | |
| Streptomyces unknown species | | | 3.89% | | | | | | | | | | | | | | | | | |
| Enterobacter hormaechei | | | | | | | | | 1.44% | 2.39% | | | | | | | | | | |
| Corynebacterium casei | | | 0.92% | | | | | 0.97% | | | | | 1.89% | | | | | | | |
| Prevotellaceae unknown species | | | | | | | | | 3.75% | | | | | | | | | | | |
| Prevotella nanceiensis | | | | 2.43% | | | | | 1.25% | | | | | | | | | | | |
| Fusobacterium perfoetens | | | | | | 3.57% | | | | | | | | | | | | | | |
| Faecalibacterium unknown species | 3.54% | | | | | | | | | | | | | | | | | | | |
| Shigella sonnei | | | | | | | | | 1.43% | 2.04% | | | | | | | | | | |
| Bacillus cereus | | | | | | | | | 1.36% | 2.10% | | | | | | | | | | |
| Lactobacillus phage Lrm1 | | | | | | | | | | | | | | | | | 3.40% | | | |
| Fusobacterium mortiferum | | | | | | 0.65% | | | | | 2.56% | | | | | | | | | |
| Corynebacterium xerosis | | | 0.90% | | | | | 0.68% | | | | | 1.57% | | | | | | | |
| Bacteroides thetaiotaomicron | | | | | | 0.63% | | | | | 2.46% | | | | | | | | | |
| Paraprevotella xylaniphila | | | | | | 0.77% | | | | | 2.30% | | | | | | | | | |
| Pan troglodytes | | | | | | | | | 1.14% | 1.83% | | | | | | | | | | |
| Sutterella unknown species | 1.31% | | | | | 1.65% | | | | | | | | | | | | | | |
| Acinetobacter baumannii | | | | | | | | | 1.17% | 1.74% | | | | | | | | | | |
| Brachybacterium unknown species | | | 2.33% | | | | | 0.53% | | | | | | | | | | | | |
| Lactobacillus phage JCL1032 | | | | | | | | | | | | | | | | | 2.78% | | | |
| Bacteroides caecimuris | | | | | | 0.51% | | | | | 2.14% | | | | | | | | | |
| Bacteroides mediterraneensis | | | | | | 2.59% | | | | | | | | | | | | | | |
| Ruania unknown species | | | 2.57% | | | | | | | | | | | | | | | | | |
| Dietzia timorensis | | | | | | | | 1.17% | | | | | 1.36% | | | | | | | |
| Lactobacillus phage J1 | | | | | | | | | | | | | | | | | 2.46% | | | |
| Bacteroides coprophilus | | | | | | 2.40% | | | | | | | | | | | | | | |
| Saccharopolyspora unknown species | | | 2.35% | | | | | | | | | | | | | | | | | |
| Lactobacillus paracasei | | 1.14% | | | | | 0.64% | | | | | 0.57% | | | | | | | | |
| Brevibacterium linens | | | | | | | | 0.53% | | | | | 1.74% | | | | | | | |
| Lactobacillus unknown species | | 1.30% | | | | | | | | 0.95% | | | | | | | | | | |
| Prevotella ruminicola | | | | | | | | | | | 2.22% | | | | | | | | | |
| Ruania albidiflava | | | | | | | | 2.16% | | | | | | | | | | | | |
| Lactobacillus kefiri | | 1.30% | | | | | 0.85% | | | | | | | | | | | | | |
| Geoglossum glabrum | | | | 0.96% | 1.11% | | | | | | | | | | | | | | | |
| Neisseria unknown species | | | | 1.09% | | | | | 0.95% | | | | | | | | | | | |
| Sphingomonas unknown species | | | 2.04% | | | | | | | | | | | | | | | | | |
| Haemophilus unknown species | | | | 1.34% | | | | | 0.68% | | | | | | | | | | | |
| Nomascus leucogenys | | | | | | | | | 0.77% | 1.23% | | | | | | | | | | |
| Corynebacterium glyciniphilum | | | | | | | | 1.32% | | | | | 0.66% | | | | | | | |
| Fusobacterium ulcerans | | | | | | 0.53% | | | | | 1.44% | | | | | | | | | |
| Butyricimonas faecalis | | | | | | | | | | | 1.96% | | | | | | | | | |
| Bacteroides ovatus | | | | | | 0.77% | | | | | 1.17% | | | | | | | | | |
| Haemophilus haemolyticus | | | | 1.93% | | | | | | | | | | | | | | | | |
| Dietzia unknown species | | | 1.79% | | | | | | | | | | | | | | | | | |
| Chlorocebus sabaeus | | | | | | | | | 0.76% | 1.03% | | | | | | | | | | |
| Prevotella intermedia | | | | | | | | | | | 1.75% | | | | | | | | | |
| Prevotella aurantiaca | | | | 1.14% | | | | | 0.54% | | | | | | | | | | | |
| Brevibacterium unknown species | | | 1.67% | | | | | | | | | | | | | | | | | |
| Lactococcus unknown species | | 1.63% | | | | | | | | | | | | | | | | | | |
| Bacteroides cellulosilyticus | | | | | | | | | | | 1.58% | | | | | | | | | |
| Bacteroides caccae | | | | | | | | | | | 1.57% | | | | | | | | | |
| Bacteroides barnesiae | | | | | | 1.53% | | | | | | | | | | | | | | |
| Bacteroides helcogenes | | | | | | | | | | | 1.50% | | | | | | | | | |
| Prevotella oris | | | | | | | | | | | 1.49% | | | | | | | | | |
| Paracoccus alcaliphilus | | | 1.48% | | | | | | | | | | | | | | | | | |
| Bacteroides dorei | | | | | | | | | | | 1.47% | | | | | | | | | |
| Microbacterium unknown species | | | 1.45% | | | | | | | | | | | | | | | | | |
| Aspergillus unknown species | | | 1.45% | | | | | | | | | | | | | | | | | |
| Janibacter unknown species | | | 1.37% | | | | | | | | | | | | | | | | | |
| Parabacteroides unknown species | 1.37% | | | | | | | | | | | | | | | | | | | |
| Fusobacterium varium | | | | | | | | | | | 1.33% | | | | | | | | | |
| Neisseria cinerea | | | | 1.32% | | | | | | | | | | | | | | | | |
| Aegilops tauschii | | | | | | | | 1.32% | | | | | | | | | | | | |
| Streptococcus unknown species | | | | 1.29% | | | | | | | | | | | | | | | | |
| Massilia unknown species | | | 1.28% | | | | | | | | | | | | | | | | | |
| Hemileia vastatrix | | | 1.27% | | | | | | | | | | | | | | | | | |
| Sphingobacterium unknown species | | | 1.26% | | | | | | | | | | | | | | | | | |
| Paracoccus unknown species | | | 1.24% | | | | | | | | | | | | | | | | | |
| Prevotella fusca | | | | | | | | | | | 1.24% | | | | | | | | | |
| Veillonella rogosae | | | | 1.19% | | | | | | | | | | | | | | | | |
| Pedobacter unknown species | | | 1.17% | | | | | | | | | | | | | | | | | |
| Bacteroides massiliensis | | | | | | 1.17% | | | | | | | | | | | | | | |
| Morococcus cerebrosus | | | | 1.16% | | | | | | | | | | | | | | | | |
| Aerococcus urinaeequi | | | | | | | | | | | | | 1.11% | | | | | | | |
| Nocardioides unknown species | | | 1.07% | | | | | | | | | | | | | | | | | |
| Weissella unknown species | | | 1.02% | | | | | | | | | | | | | | | | | |
| Sutterella megalosphaeroides | | | | | | | | | | | 1.00% | | | | | | | | | |

**Figure S1**