

Velvet Assembler

	Coverage of Unfiltered by Filtered Assembly	Coverage of Normalized Filtered by Unfiltered Assembly	Coverage of Reference Genes by Unfiltered	Coverage of Reference Genes by Filtered	Unfiltered Assembly Statistics (No. of Contigs/Assembly Length(bp)/Max Contig Size (bp))	Normalized Assembly Statistics (No. of Contigs/Assembly Length(bp)/Max Contig Size (bp))	Unfiltered Assembly Requirements (Memory, GB / Time (hours))
Small Soil	74.5%	98.6%	-	-	25,470 / 16,269,879 / 118,753	17,636 / 10,578,908 / 13,246	5 / 4
Medium Soil	75.4%	98.1%	-	-	113,613 / 81,660,678 / 57,856	79,654 / 54,424,264 / 23,663	18 / 21
Large Soil	50.8%	86.3%	-	-	554,825 / 306,899,884 / 41,217	290,018 / 159,960,062 / 41,423	33 / 12*
Rumen	75.1%	98.3%	17.2%	14.6%	92,044 / 74,813,072 / 182,003	72,705 / 49,518,627 / 34,683	11 / 14
Human Gut	79.5%	88.5%	-	-	543,331 / 234,686,983 / 85,596	203,299 / 181,934,800 / 145,740	76 / 8*
Simulated	84.6%	98.3%	4.5%	3.9%	11,204 / 6,506,248 / 5,151	9,859 / 5,463,067 / 6,605	< 1 / < 1

†

Meta-IDBA Assembler

	Coverage of Unfiltered by Filtered Assembly	Coverage of Normalized Filtered by Unfiltered Assembly	Coverage of Reference Genes by Unfiltered	Coverage of Reference Genes by Filtered	Unfiltered Assembly Statistics (No. of Contigs/Assembly Length(bp)/Max Contig Size (bp))	Normalized Assembly Statistics (No. of Contigs/Assembly Length(bp)/Max Contig Size (bp))	Unfiltered Assembly Requirements (Memory, GB / Time (hours))
Small Soil	75.6%	93.9%	-	-	15,739 / 9,133,564 / 37,738	12,513 / 7,012,036 / 17,048	< 1 / < 1
Medium Soil	67.5%	94.5%	-	-	76,269 / 45,844,975 / 37,738	52,978 / 30,040,031 / 18,882	2 / 2
Large Soil	N/A	N/A	-	-	N/A	395,122 / 228,857,098 / 37,738	> 116 / incomplete
Rumen	70.4%	94.4%	15.5%	13.0%	60,330 / 47,984,619 / 54,407	48,940 / 33,276,502 / 22,083	12 / 3
Human Gut	74.0%	96.5%	-	-	173,432 / 211,067,996 / 106,503	132,614 / 142,139,101 / 85,539	58 / 15
Simulated	86.5%	93.4%	3.8%	3.5%	8,707 / 4,698,575 / 5,113	7,726 / 4,078,947 / 3,845	< 1 / < 1

SOAPdenovo Assembler

	Coverage of Unfiltered by Filtered Assembly	Coverage of Normalized Filtered by Unfiltered Assembly	Coverage of Reference Genes by Unfiltered	Coverage of Reference Genes by Filtered	Unfiltered Assembly Statistics (No. of Contigs/Assembly Length(bp)/Max Contig Size (bp))	Normalized Assembly Statistics (No. of Contigs/Assembly Length(bp)/Max Contig Size (bp))	Unfiltered Assembly Requirements (Memory, GB / Time (hours))
Small Soil	86.6%	95.8%	-	-	14,275 / 7,100,052 / 37,720	12,801 / 6,343,110 / 13,246	3 / < 1
Medium Soil	82.2%	95.7%	-	-	66,640 / 33,321,411 / 28,695	56,023 / 27,880,293 / 15,721	10 / < 1
Large Soil	78.7%	94.2%	-	-	412,059 / 215,614,765 / 32,514	334,319 / 171,718,154 / 41,423	48 / 11
Rumen	84.7%	97.3%	14.7%	13.4%	62,896 / 40,792,029 / 22,875	55,975 / 34,540,861 / 19,044	5 / < 1
Human Gut	84.9%	98.5%	-	-	190,963 / 171,502,574 / 57,803	161,795 / 139,686,630 / 56,034	35 / 5
Simulated	93.2%	96.1%	2.5%	2.4%	6,322 / 2,940,509 / 3,786	6,029 / 2,821,631 / 3,764	< 1 / < 1

