

# HybPhyloMaker software

				0	1	2	3	4	4b	5	6	7	8a	8b	8c	8e	8f	8g	9	10	
Software	Source	Install (yes/no)	Used command(s)	Sample preparation	Raw data processing	Read mapping	Generate psix	Process psix	Correct frame, translate	Missing data handling	Gene tree building	Root trees	ASTRAL	ASTRID	MRL	Concatenated FastTree	ExaML	BUCKy	Update	Collapse trees & select	Reports
GNU parallel	<a href="http://www.gnu.org/software/parallel/">http://www.gnu.org/software/parallel/</a>	y	parallel	x				x													
Bowtie2	<a href="http://bowtie-bio.sourceforge.net/bowtie2/index.shtml">http://bowtie-bio.sourceforge.net/bowtie2/index.shtml</a>	y	bowtie2-build, bowtie2		x	x															
BWA	<a href="http://bio-bwa.sourceforge.net/">http://bio-bwa.sourceforge.net/</a>	y	bwa mem			x															
SAMtools	<a href="http://samtools.sourceforge.net/">http://samtools.sourceforge.net/</a>	y	samtools		x	x															
bam2fastq	<a href="https://gs1.hudsonalpha.org/information/software/bam2fastq">https://gs1.hudsonalpha.org/information/software/bam2fastq</a>	y	bam2fastq		x																
Trimmomatic	<a href="http://www.usadellab.org/cms/?page=trimmomatic">http://www.usadellab.org/cms/?page=trimmomatic</a>	n	java -jar trimmomatic-0.33.jar		x																
FastUniq	<a href="https://sourceforge.net/projects/fastuniq/">https://sourceforge.net/projects/fastuniq/</a>	y	fastuniq		x																
JDK/JRE	<a href="http://www.oracle.com/technetwork/java/javase/">http://www.oracle.com/technetwork/java/javase/</a>	y	java		x								x	x	x					x	
OCOCO	<a href="https://github.com/karel-brinda/ococo">https://github.com/karel-brinda/ococo</a>	y	ococo			x															
kindel	<a href="https://pypi.python.org/pypi/kindel">https://pypi.python.org/pypi/kindel</a>	y	kindel			x															
Perl	<a href="https://www.perl.org/">https://www.perl.org/</a>	y	perl		x			x	x		x					x					
BLAT suite	<a href="https://genome.ucsc.edu/goldenpath/help/blatSpec.html">https://genome.ucsc.edu/goldenpath/help/blatSpec.html</a>	y	blat				x														
MAFFT	<a href="http://mafft.cbrc.jp/alignment/software/">http://mafft.cbrc.jp/alignment/software/</a>	y	mafft					x													
Python	<a href="https://www.python.org/">https://www.python.org/</a>	y	python					x					x	x							
Python3	<a href="https://www.python.org/download/releases/3.0/">https://www.python.org/download/releases/3.0/</a>	y	python3			x			x	x											
AMAS	<a href="https://github.com/marekborowiec/AMAS/">https://github.com/marekborowiec/AMAS/</a>	n	python3 amas.py					x	x	x	x		x	x		x	x				
EMBOSS	<a href="http://emboss.open-bio.org/">http://emboss.open-bio.org/</a>	y	transeq						x												
TrimAl	<a href="http://trimal.cgenomics.org/">http://trimal.cgenomics.org/</a>	y	trimal							x											
MstatX	<a href="https://github.com/gcollet/MstatX">https://github.com/gcollet/MstatX</a>	y	mstatx							x											
FastTree	<a href="http://www.microbesonline.org/fasttree/">http://www.microbesonline.org/fasttree/</a>	y	fasttree								x					x					
Newick Utilities	<a href="http://cegg.unige.ch/newick_utils">http://cegg.unige.ch/newick_utils</a>	y	nw_reroot, nw_topology							x	x	x	x	x						x	
RAxML	<a href="http://sco.h-its.org/exelixis/web/software/raxml/index.html">http://sco.h-its.org/exelixis/web/software/raxml/index.html</a>	y	raxmlHPC								x				x		x				
R	<a href="https://www.r-project.org/">https://www.r-project.org/</a>	y	R							x	x							x	x		x
ASTRAL	<a href="https://github.com/Smirab/ASTRAL">https://github.com/Smirab/ASTRAL</a>	n	java -jar astral.5.6.1.jar										x								
ASTRID	<a href="https://github.com/pranjalv123/ASTRID">https://github.com/pranjalv123/ASTRID</a>	n	ASTRID											x							
p4	<a href="http://p4.nhm.ac.uk">http://p4.nhm.ac.uk</a>	y	p4										x	x							
mrpmatrix	<a href="https://github.com/Smirab/mrpmatrix">https://github.com/Smirab/mrpmatrix</a>	n	java -jar mrp.jar												x						
ExaML	<a href="http://sco.h-its.org/exelixis/web/software/examl/index.html">http://sco.h-its.org/exelixis/web/software/examl/index.html</a>	y	examl														x				
BUCKy	<a href="https://www.stat.wisc.edu/~ane/bucky/">https://www.stat.wisc.edu/~ane/bucky/</a>	y	mbsum, bucky															x			