

Demethylase gain from Eukaryota on

CupinJmjC n=86
SWIRM n=2

N=88 at $p \geq 0.50$

Demethylase gain from Opisthokonta on

CupinJmjC n=34

N=34 at $p \geq 0.50$

Demethylase gain from Metazoa on

CupinJmjC n=8

N=8 at $p \geq 0.50$

Demethylase gain from Chordata on

CupinJmjC n=1

N=1 at $p \geq 0.50$

Demethylase gain from Amorphozoa on

CupinJmjC n=48

N=48 at $p \geq 0.50$

Demethylase gain from Holozoa on

CupinJmjC n=28

N=28 at $p \geq 0.50$

Demethylase gain from Bilicnizoa on

CupinJmjC n=5

N=5 at $p \geq 0.50$

Demethylase gain from Ambulacraria on

CupinJmjC n=1

N=1 at $p \geq 0.50$

Demethylase gain from Amorphea on

CupinJmjC n=44

N=44 at $p \geq 0.50$

Demethylase gain from Filozoa on

CupinJmjC n=22

N=22 at $p \geq 0.50$

Demethylase gain from Bilateria on

CupinJmjC n=4

N=4 at $p \geq 0.50$

Demethylase gain from Hemichordata on

CupinJmjC n=1

N=1 at $p \geq 0.50$

Demethylase gain from Obazoa on

CupinJmjC n=42

N=42 at $p \geq 0.50$

Demethylase gain from Choanozoa on

CupinJmjC n=16

N=16 at $p \geq 0.50$

Demethylase gain from Deuterostomia on

CupinJmjC n=1

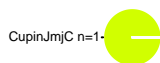
N=1 at $p \geq 0.50$

Demethylase gain from Protostomia on

CupinJmjC n=3

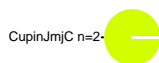
N=3 at $p \geq 0.50$

Demethylase gain from ArtTardi on



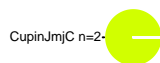
N=1 at $p \geq 0.50$

Demethylase gain from Lophotrochozo



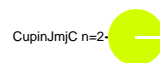
N=2 at $p \geq 0.50$

Demethylase gain from CniTri on



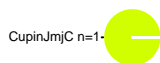
N=2 at $p \geq 0.50$

Demethylase gain from Porifera on



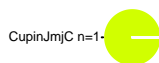
N=2 at $p \geq 0.50$

Demethylase gain from Arthropoda c



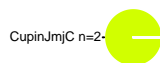
N=1 at $p \geq 0.50$

Demethylase gain from Mollusca or



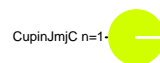
N=1 at $p \geq 0.50$

Demethylase gain from Cnidaria or



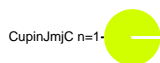
N=2 at $p \geq 0.50$

Demethylase gain from Demospongiae



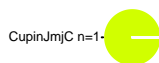
N=1 at $p \geq 0.50$

Demethylase gain from Pancrustacea



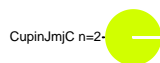
N=1 at $p \geq 0.50$

Demethylase gain from AnnKryp or



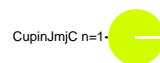
N=1 at $p \geq 0.50$

Demethylase gain from Anthozoa or



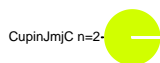
N=2 at $p \geq 0.50$

Demethylase gain from EphyTet on



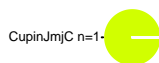
N=1 at $p \geq 0.50$

Demethylase gain from Spiralia on



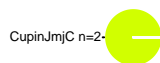
N=2 at $p \geq 0.50$

Demethylase gain from Annelida or



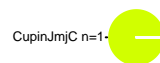
N=1 at $p \geq 0.50$

Demethylase gain from Actinaria or



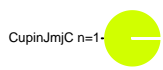
N=2 at $p \geq 0.50$

Demethylase gain from HomoCalc o



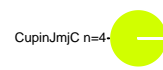
N=1 at $p \geq 0.50$

Demethylase gain from Calcarea or



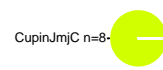
N=1 at $p \geq 0.50$

Demethylase gain from Ichthyosporea



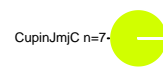
N=4 at $p \geq 0.50$

Demethylase gain from Fungi on



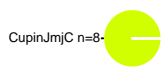
N=8 at $p \geq 0.50$

Demethylase gain from Dikarya on



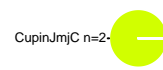
N=7 at $p \geq 0.50$

Demethylase gain from Choanoflagellat



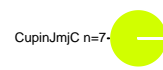
N=8 at $p \geq 0.50$

Demethylase gain from Ichthyophonida



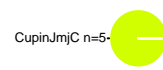
N=2 at $p \geq 0.50$

Demethylase gain from Eufungi on



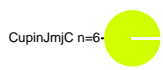
N=7 at $p \geq 0.50$

Demethylase gain from Ascomycota



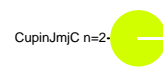
N=5 at $p \geq 0.50$

Demethylase gain from Filasterea o



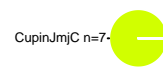
N=6 at $p \geq 0.50$

Demethylase gain from SarcCfra or



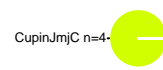
N=2 at $p \geq 0.50$

Demethylase gain from TerFun on



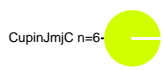
N=7 at $p \geq 0.50$

Demethylase gain from saccharomycet



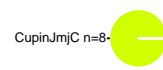
N=4 at $p \geq 0.50$

Demethylase gain from Teretosporea



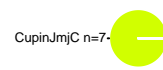
N=6 at $p \geq 0.50$

Demethylase gain from Holomycota



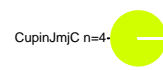
N=8 at $p \geq 0.50$

Demethylase gain from DikaMuco o



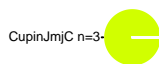
N=7 at $p \geq 0.50$

Demethylase gain from Pezizomycotina



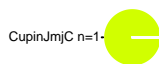
N=4 at $p \geq 0.50$

Demethylase gain from Basidiomycota



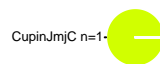
N=3 at $p \geq 0.50$

Demethylase gain from Chytridiomycetes



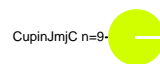
N=1 at $p \geq 0.50$

Demethylase gain from Eumycetozoa



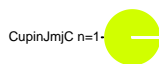
N=1 at $p \geq 0.50$

Demethylase gain from Ancyroplasma



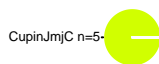
N=9 at $p \geq 0.50$

Demethylase gain from Agaricomycotina



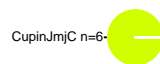
N=1 at $p \geq 0.50$

Demethylase gain from Amoebozoa

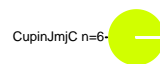


N=5 at $p \geq 0.50$

Demethylase gain from CRuMs on

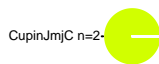


N=6 at $p \geq 0.50$



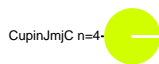
N=6 at $p \geq 0.50$

Demethylase gain from Chytridiomycota



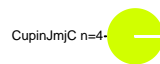
N=2 at $p \geq 0.50$

Demethylase gain from Eozoa



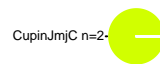
N=4 at $p \geq 0.50$

Demethylase gain from Rigidiploids



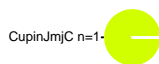
N=4 at $p \geq 0.50$

Demethylase gain from Malawimonadidae



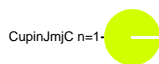
N=2 at $p \geq 0.50$

Demethylase gain from Monoblasts



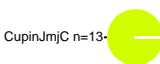
N=1 at $p \geq 0.50$

Demethylase gain from Eozoa



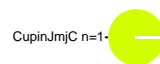
N=1 at $p \geq 0.50$

Demethylase gain from Ancyromonadidae



N=13 at $p \geq 0.50$

Demethylase gain from Malawimonadidae



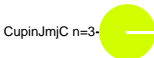
N=1 at $p \geq 0.50$

Demethylase gain from Diaphoraticke



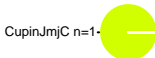
N=65 at $p \geq 0.50$

Demethylase gain from Streptophyta



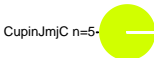
N=3 at $p \geq 0.50$

Demethylase gain from Euphylllophyta



N=1 at $p \geq 0.50$

Demethylase gain from Tetraphytina



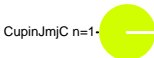
N=5 at $p \geq 0.50$

Demethylase gain from ArchaeCry c



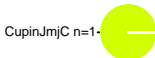
N=27 at $p \geq 0.50$

Demethylase gain from Embryophyta



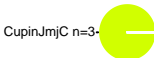
N=1 at $p \geq 0.50$

Demethylase gain from Polypodiopsid



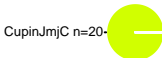
N=1 at $p \geq 0.50$

Demethylase gain from ChlorUlvophy



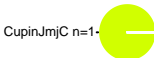
N=3 at $p \geq 0.50$

Demethylase gain from Archaeplastid



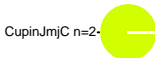
N=20 at $p \geq 0.50$

Demethylase gain from TrachBryophyt



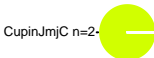
N=1 at $p \geq 0.50$

Demethylase gain from Charophyta c



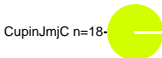
N=2 at $p \geq 0.50$

Demethylase gain from Chlorophyceae



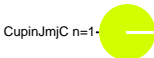
N=2 at $p \geq 0.50$

Demethylase gain from Viridiplantae



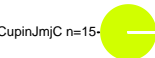
N=18 at $p \geq 0.50$

Demethylase gain from Tracheophyta



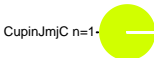
N=1 at $p \geq 0.50$

Demethylase gain from Chlorophyta c



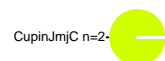
N=15 at $p \geq 0.50$

Demethylase gain from Ulvophyceae



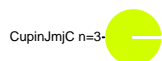
N=1 at $p \geq 0.50$

Demethylase gain from Trebouxiophyceae



N=2 at $p \geq 0.50$

Demethylase gain from Eurhodophytin



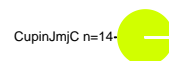
N=3 at $p \geq 0.50$

Demethylase gain from SAR on



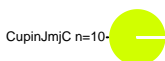
N=46 at $p \geq 0.50$

Demethylase gain from Ochrophyta



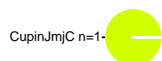
N=14 at $p \geq 0.50$

Demethylase gain from Mamiellophyceae



N=10 at $p \geq 0.50$

Demethylase gain from Florideophyceae



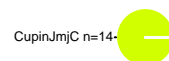
N=1 at $p \geq 0.50$

Demethylase gain from StrAlv on



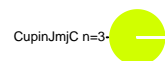
N=33 at $p \geq 0.50$

Demethylase gain from DiatPelag o



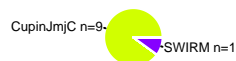
N=14 at $p \geq 0.50$

Demethylase gain from Rhodophyta



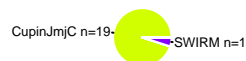
N=3 at $p \geq 0.50$

Demethylase gain from Cryptista o



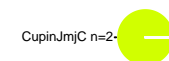
N=10 at $p \geq 0.50$

Demethylase gain from Stramenopiles



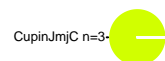
N=20 at $p \geq 0.50$

Demethylase gain from Oomycota o



N=2 at $p \geq 0.50$

Demethylase gain from EurhPorp o



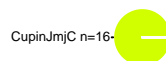
N=3 at $p \geq 0.50$

Demethylase gain from SARHap o



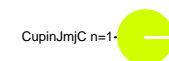
N=52 at $p \geq 0.50$

Demethylase gain from Gyrista o



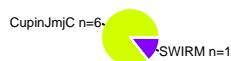
N=16 at $p \geq 0.50$

Demethylase gain from PhytAlbu o



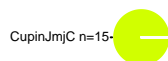
N=1 at $p \geq 0.50$

Demethylase gain from Labyrinthulea



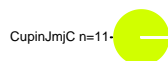
N=7 at $p \geq 0.50$

Demethylase gain from ApiDino on



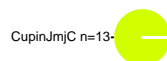
N=15 at $p \geq 0.50$

Demethylase gain from Dinoflagellata



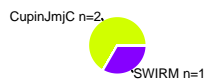
N=11 at $p \geq 0.50$

Demethylase gain from Cercozoa on



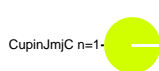
N=13 at $p \geq 0.50$

Demethylase gain from Thraustochytric



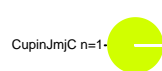
N=3 at $p \geq 0.50$

Demethylase gain from ApiChrom o



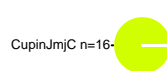
N=1 at $p \geq 0.50$

Demethylase gain from Ciliata on



N=1 at $p \geq 0.50$

Demethylase gain from Haptista on



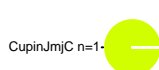
N=16 at $p \geq 0.50$

Demethylase gain from SchyHond o



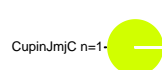
N=2 at $p \geq 0.50$

Demethylase gain from Chromerida (Demethylase gain from Oligohymenoph

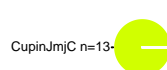


N=1 at $p \geq 0.50$

Demethylase gain from Prymnesiophyce

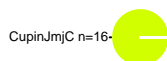


N=1 at $p \geq 0.50$



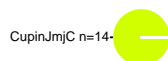
N=13 at $p \geq 0.50$

Demethylase gain from Alveolata o



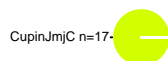
N=16 at $p \geq 0.50$

Demethylase gain from Dinozoa on

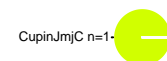


N=14 at $p \geq 0.50$

Demethylase gain from Rhizaria on Demethylase gain from Hemimastigoph

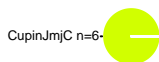


N=17 at $p \geq 0.50$



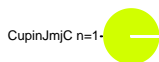
N=1 at $p \geq 0.50$

Demethylase gain from *Discoba* on



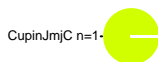
N=6 at $p \geq 0.50$

Demethylase gain from Euglenozoa c



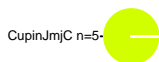
N=1 at $p \geq 0.50$

Demethylase gain from Jakoba on



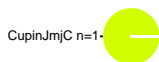
N=1 at $p \geq 0.50$

Demethylase gain from Discicristata



N=5 at $p \geq 0.50$

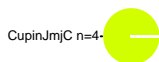
Demethylase gain from Jakobida or



N=1 at $p \geq 0.50$

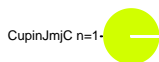


Demethylase gain from Heterolobosea



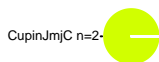
N=4 at $p \geq 0.50$

Demethylase gain from Histionina o



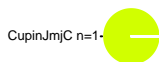
N=1 at $p \geq 0.50$

Demethylase gain from TetraPhary c



N=2 at $p \geq 0.50$

Demethylase gain from JakSec on



N=1 at $p \geq 0.50$