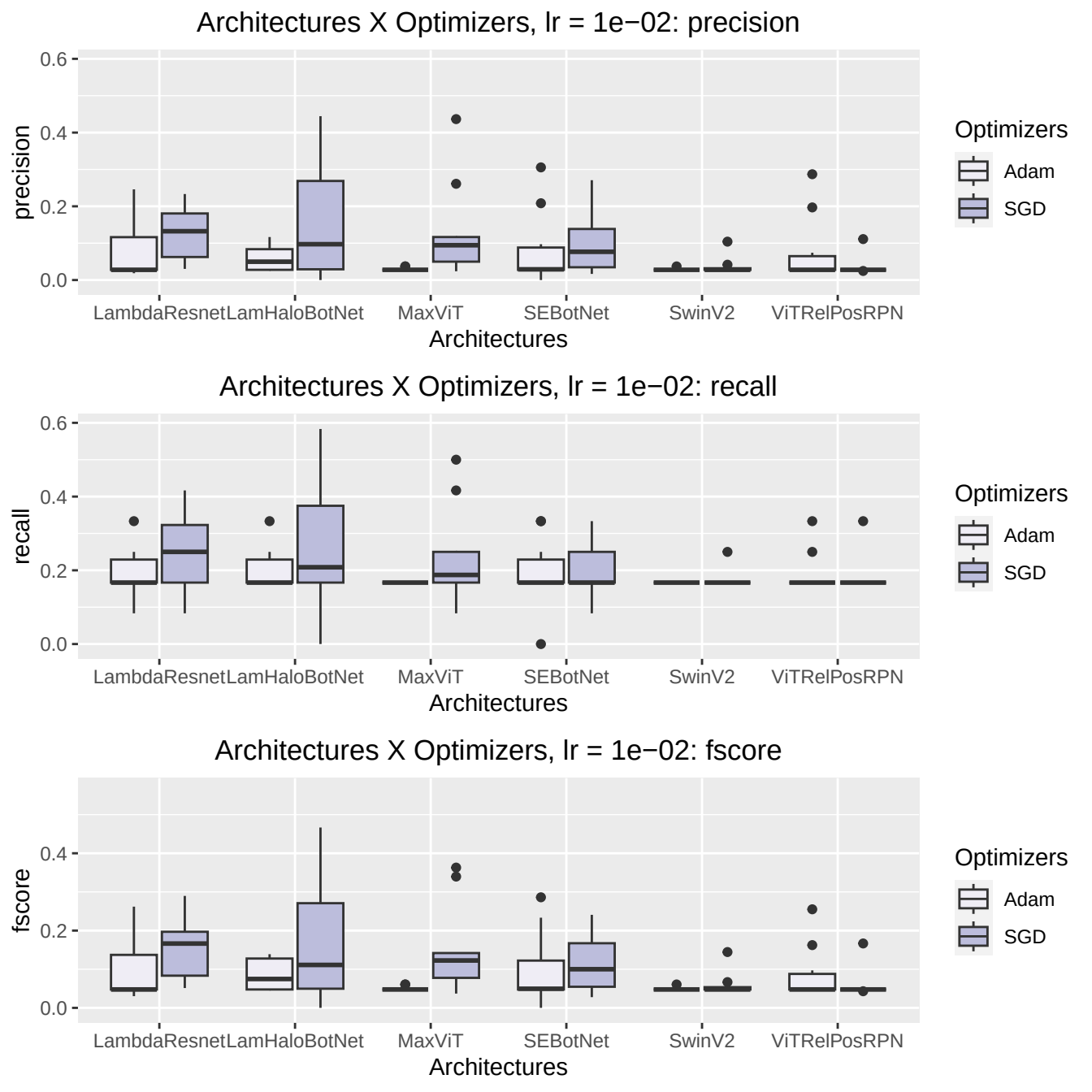
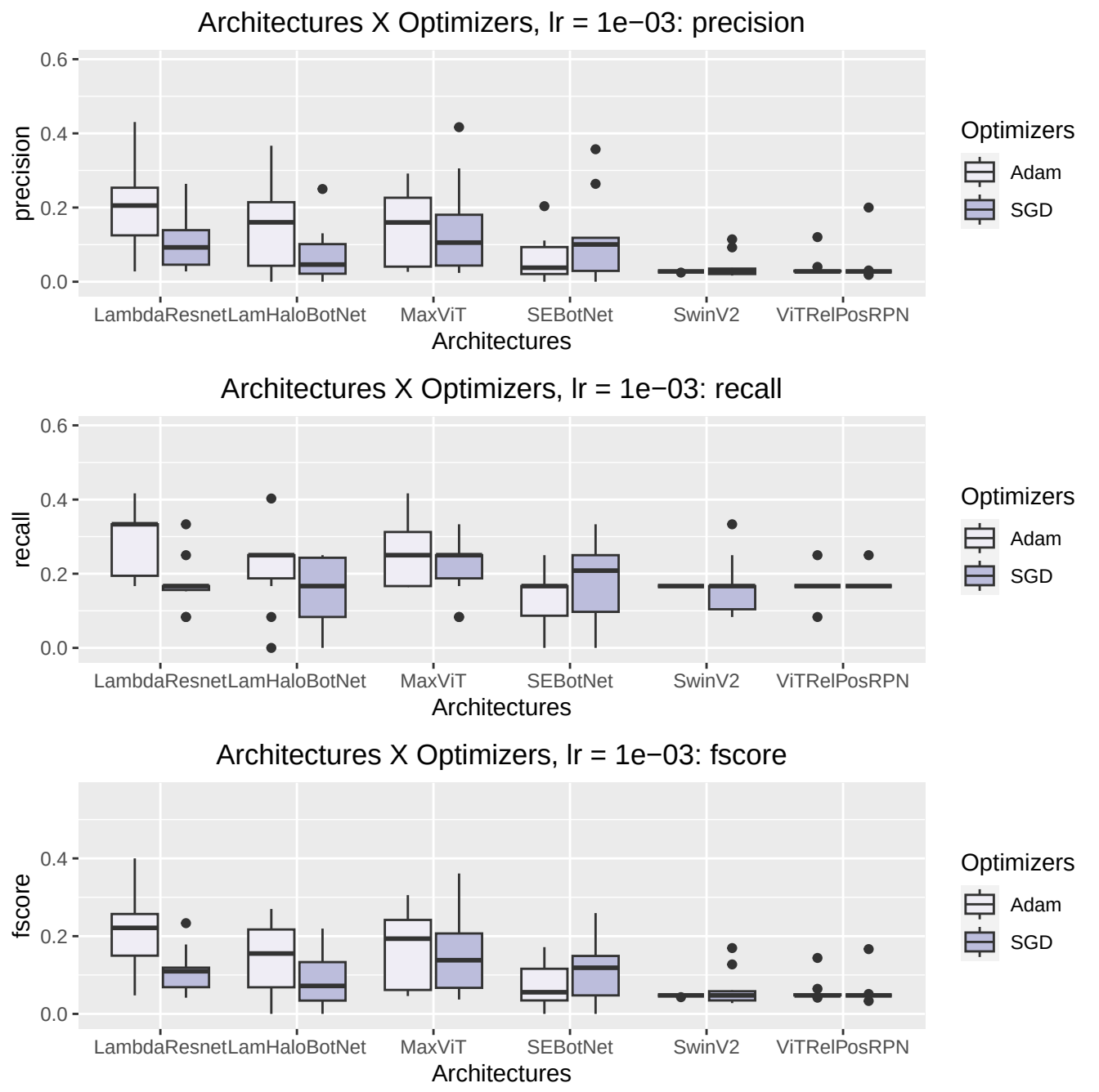
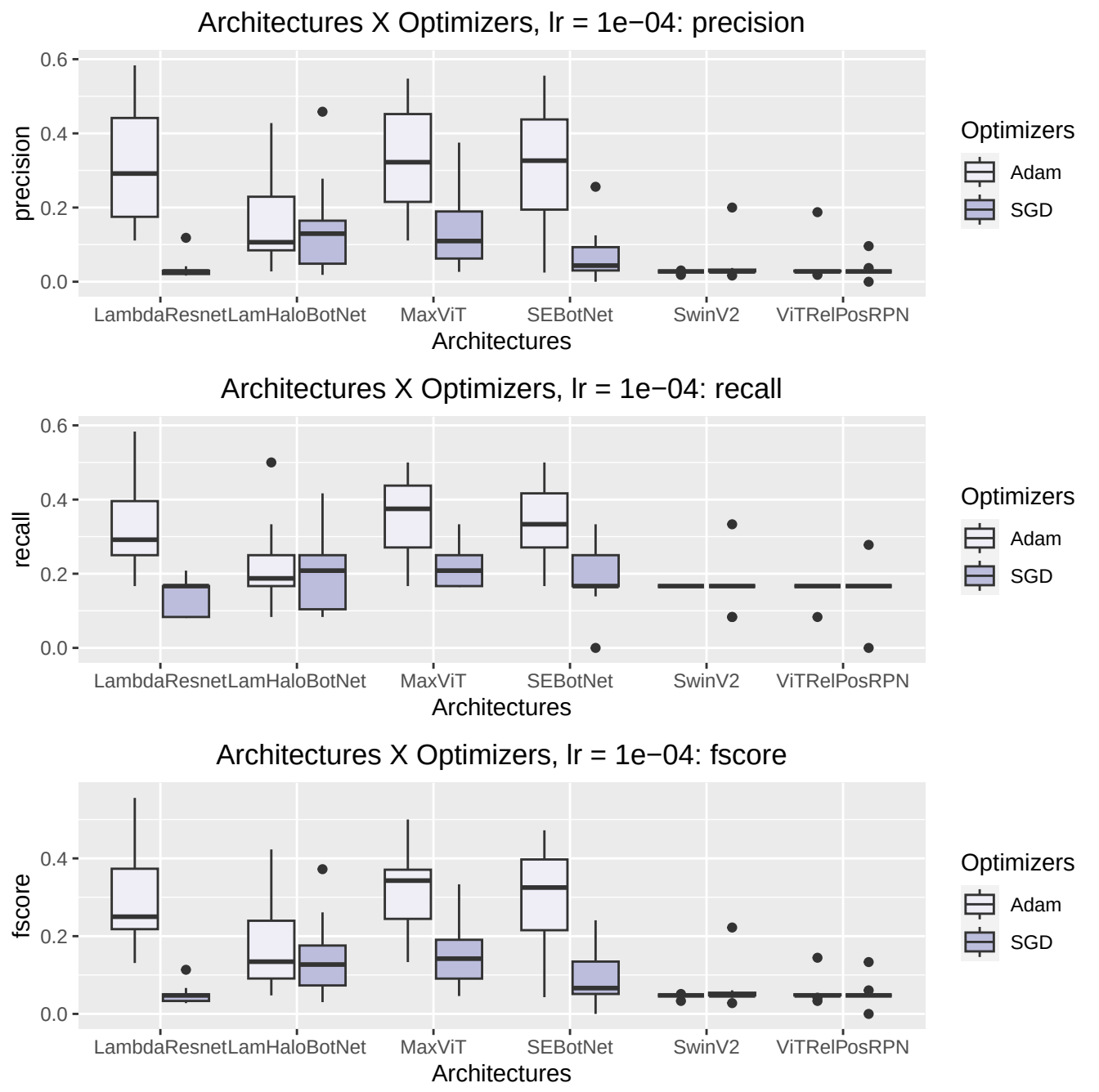
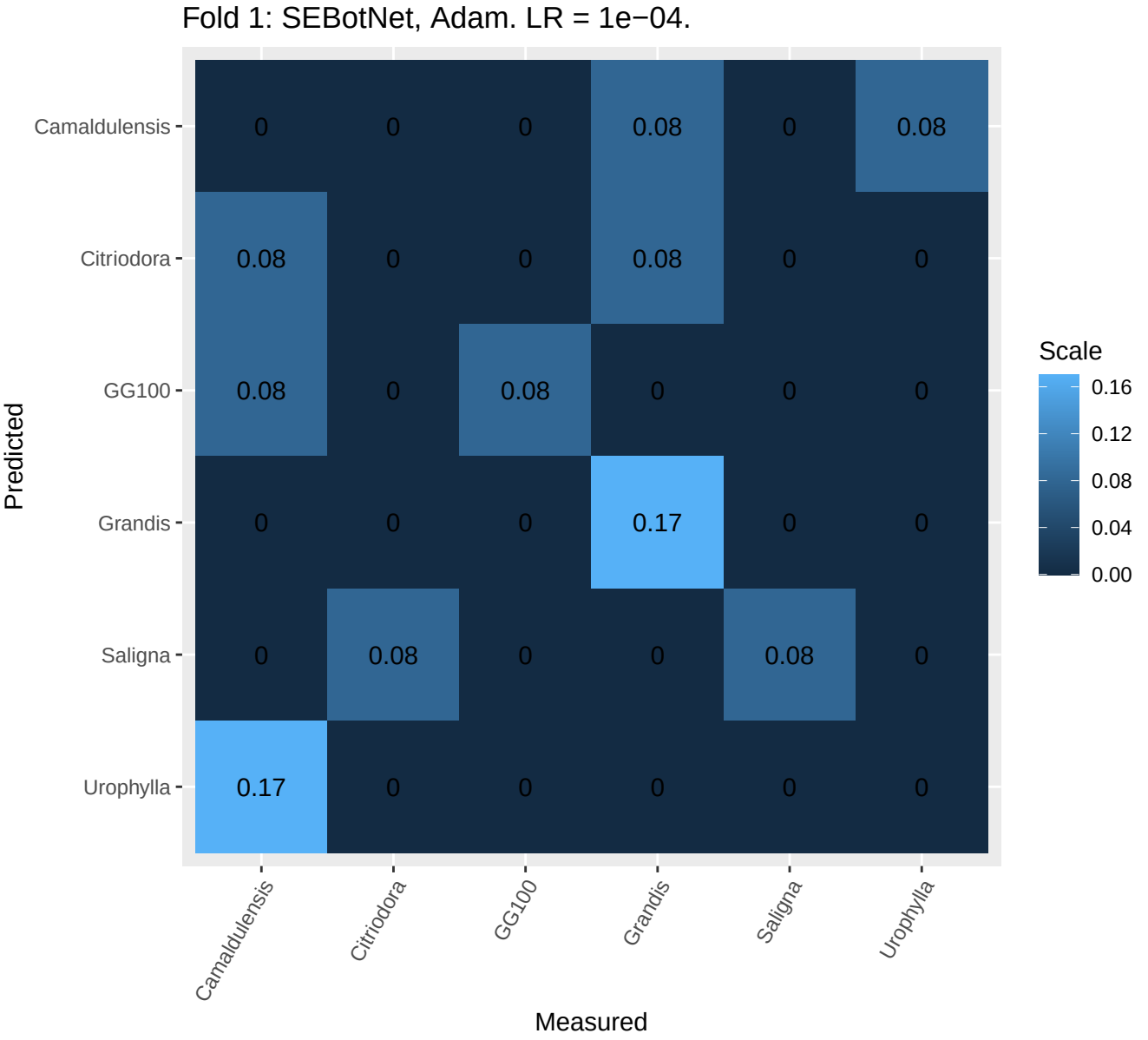
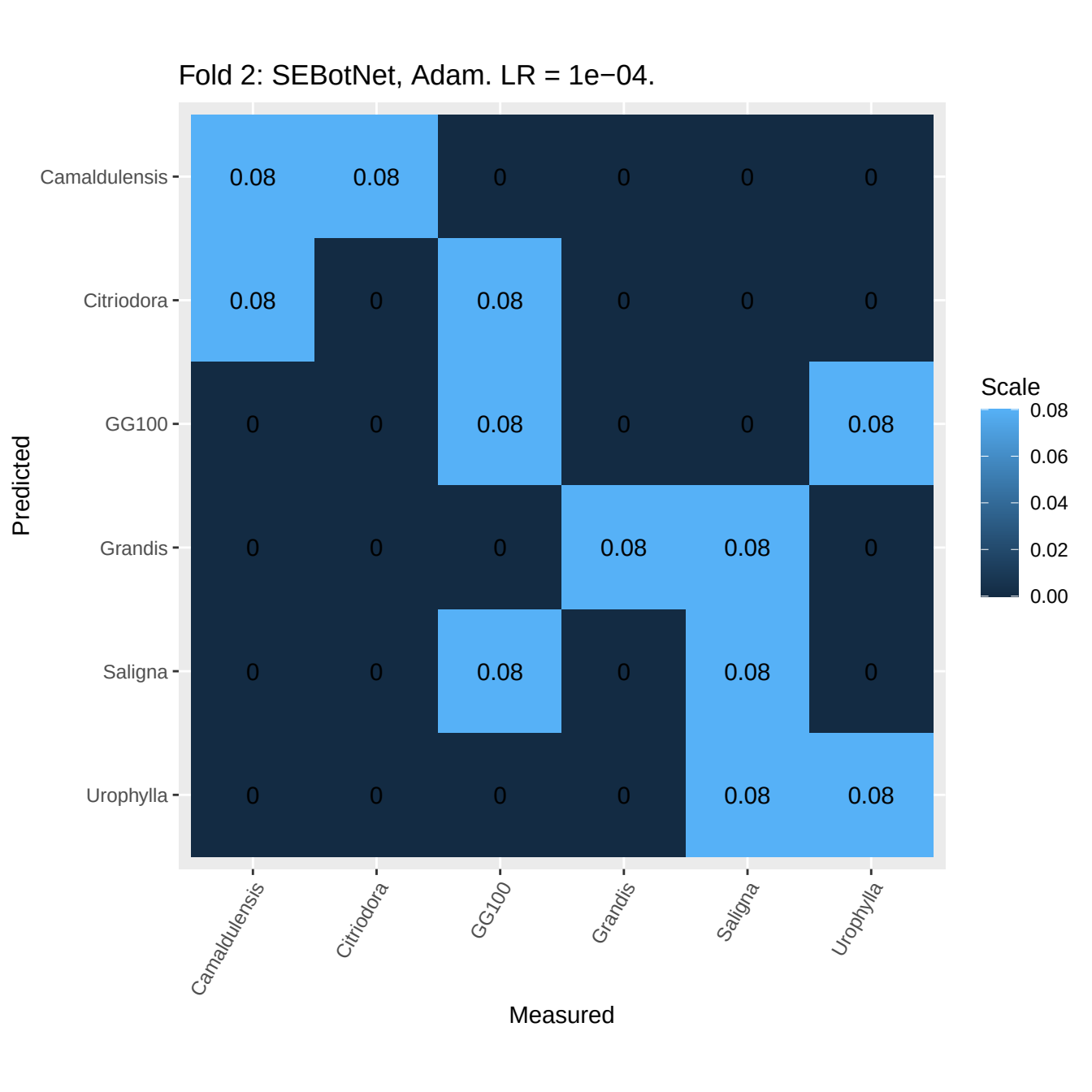
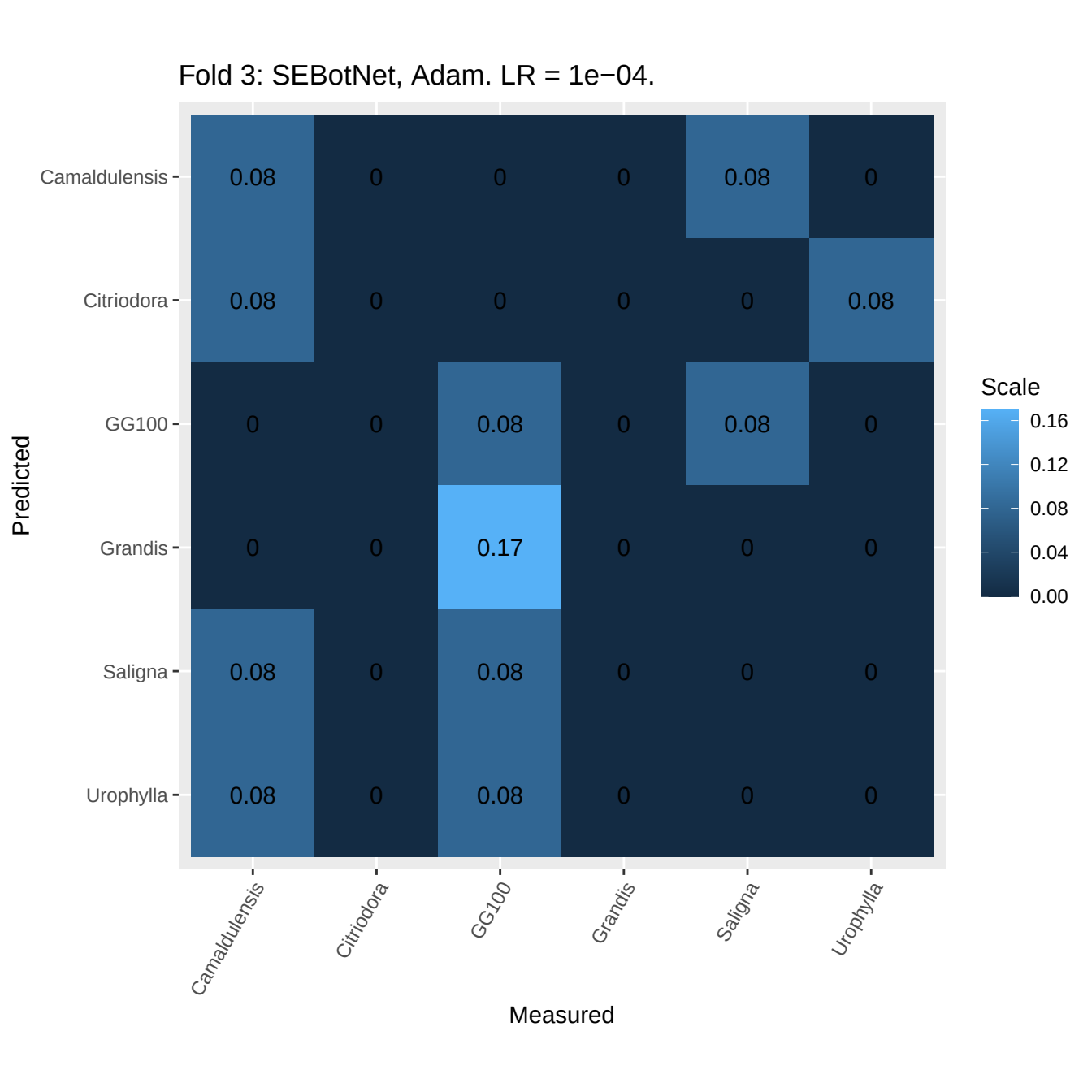

Architectures X Optimizers, lr = 1e−02: precision
precision
0.6
0.4
0.2
0.0
LambdaResnet
LamHaloBotNet
MaxViT
SEBotNet
SwinV2
ViTRelPosRPN
Architectures
Optimizers
Adam
SGD
Architectures X Optimizers, lr = 1e−02: recall
recall
0.6
0.4
0.2
0.0
LambdaResnet
LamHaloBotNet
MaxViT
SEBotNet
SwinV2
ViTRelPosRPN
Architectures
Optimizers
Adam
SGD
Architectures X Optimizers, lr = 1e−02: fscore
fscore
0.4
0.2
0.0
LambdaResnet
LamHaloBotNet
MaxViT
SEBotNet
SwinV2
ViTRelPosRPN
Architectures
Optimizers
Adam
SGD

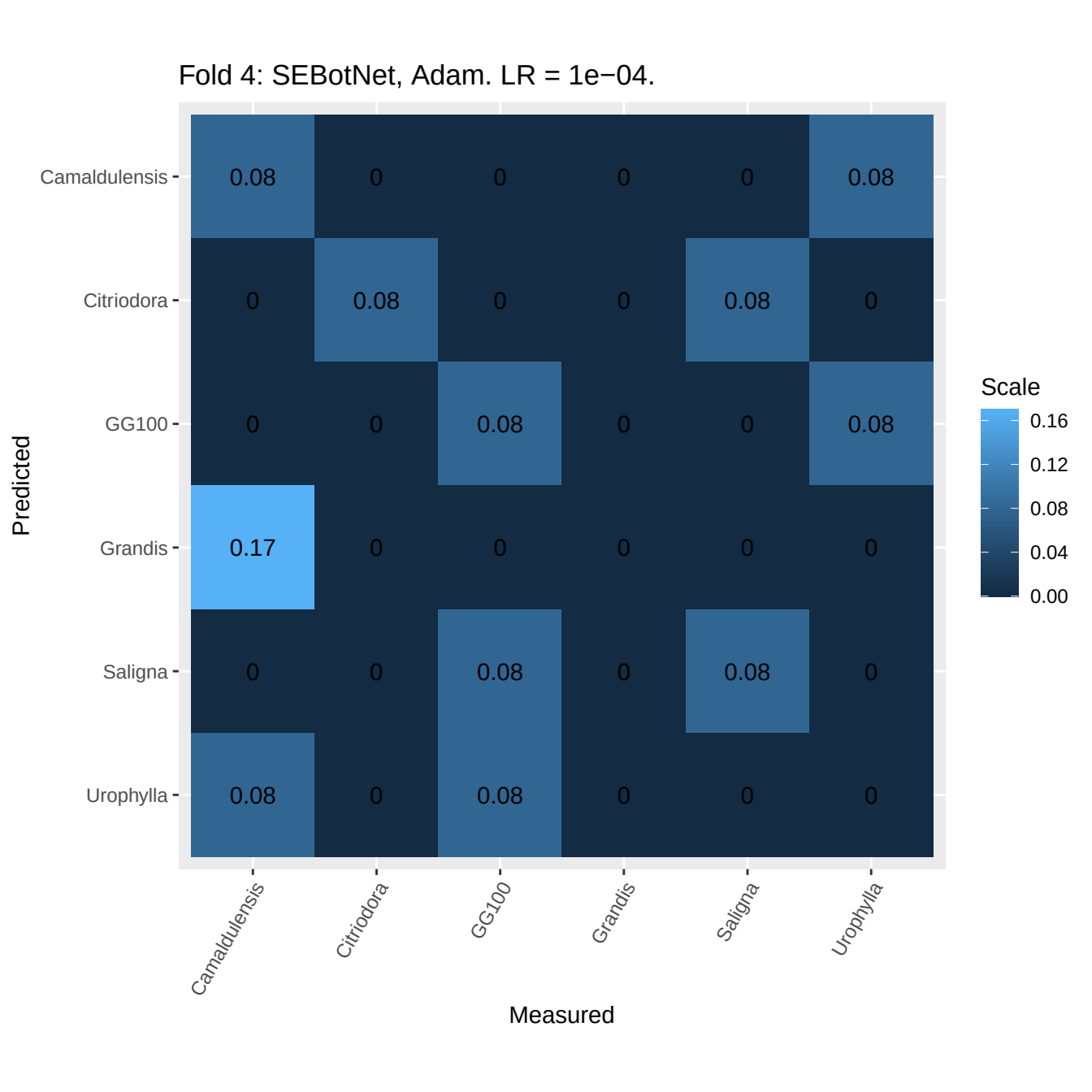

Architectures X Optimizers, lr = 1e−03: precision
precision
0.6
0.4
0.2
0.0
LambdaResnetLamHaloBotNet
MaxViT
SEBotNet
SwinV2
ViTRelPosRPN
Architectures
Optimizers
Adam
SGD
Architectures X Optimizers, lr = 1e−03: recall
recall
0.6
0.4
0.2
0.0
LambdaResnetLamHaloBotNet
MaxViT
SEBotNet
SwinV2
ViTRelPosRPN
Architectures
Optimizers
Adam
SGD
Architectures X Optimizers, lr = 1e−03: fscore
fscore
0.4
0.2
0.0
LambdaResnetLamHaloBotNet
MaxViT
SEBotNet
SwinV2
ViTRelPosRPN
Architectures
Optimizers
Adam
SGD

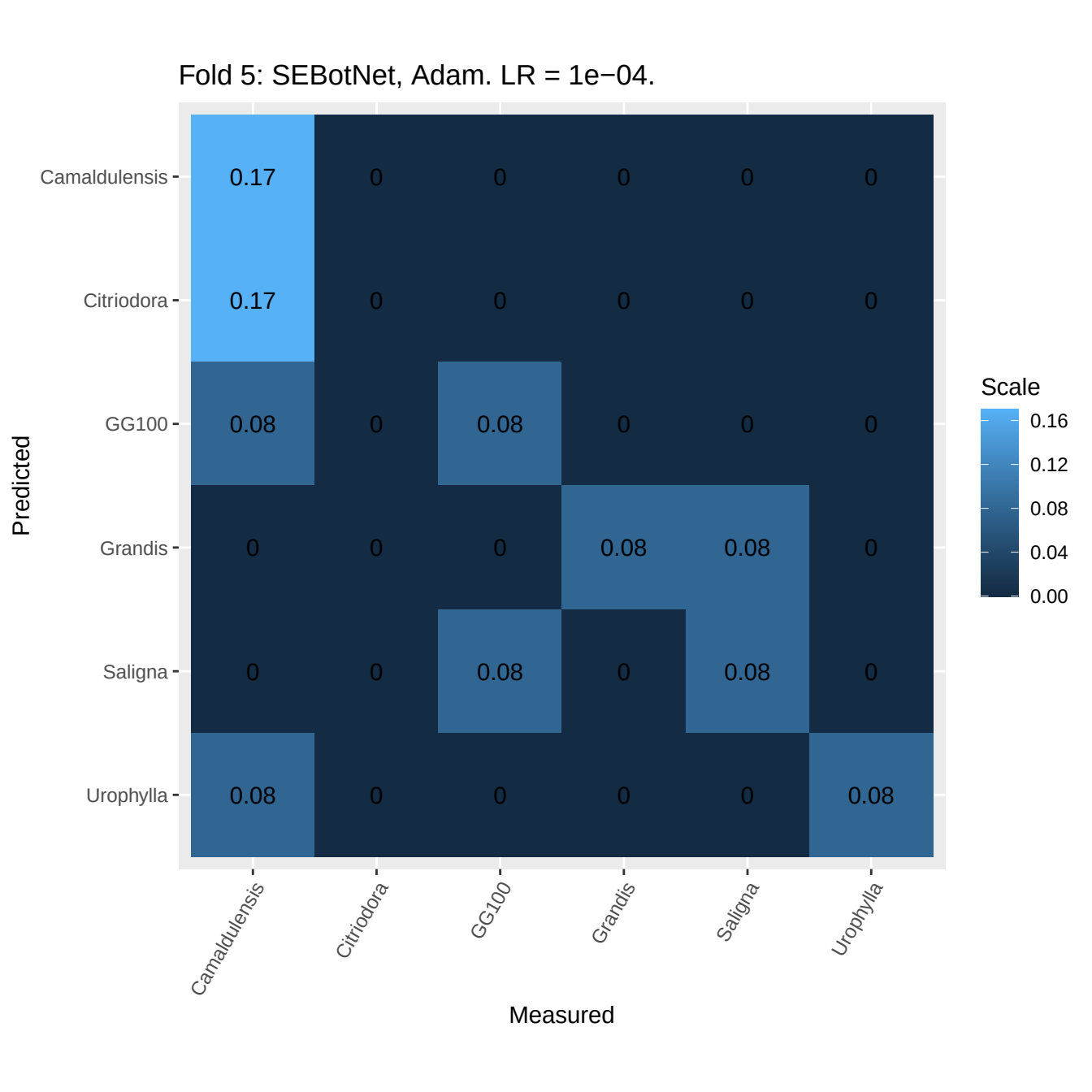

Architectures X Optimizers, lr = 1e−04: precision
precision
0.6
0.4
0.2
0.0
LambdaResnet
LamHaloBotNet
MaxViT
SEBotNet
SwinV2
ViTRelPosRPN
Architectures
Optimizers
Adam
SGD
Architectures X Optimizers, lr = 1e−04: recall
recall
0.6
0.4
0.2
0.0
LambdaResnet
LamHaloBotNet
MaxViT
SEBotNet
SwinV2
ViTRelPosRPN
Architectures
Optimizers
Adam
SGD
Architectures X Optimizers, lr = 1e−04: fscore
fscore
0.4
0.2
0.0
LambdaResnet
LamHaloBotNet
MaxViT
SEBotNet
SwinV2
ViTRelPosRPN
Architectures
Optimizers
Adam
SGD

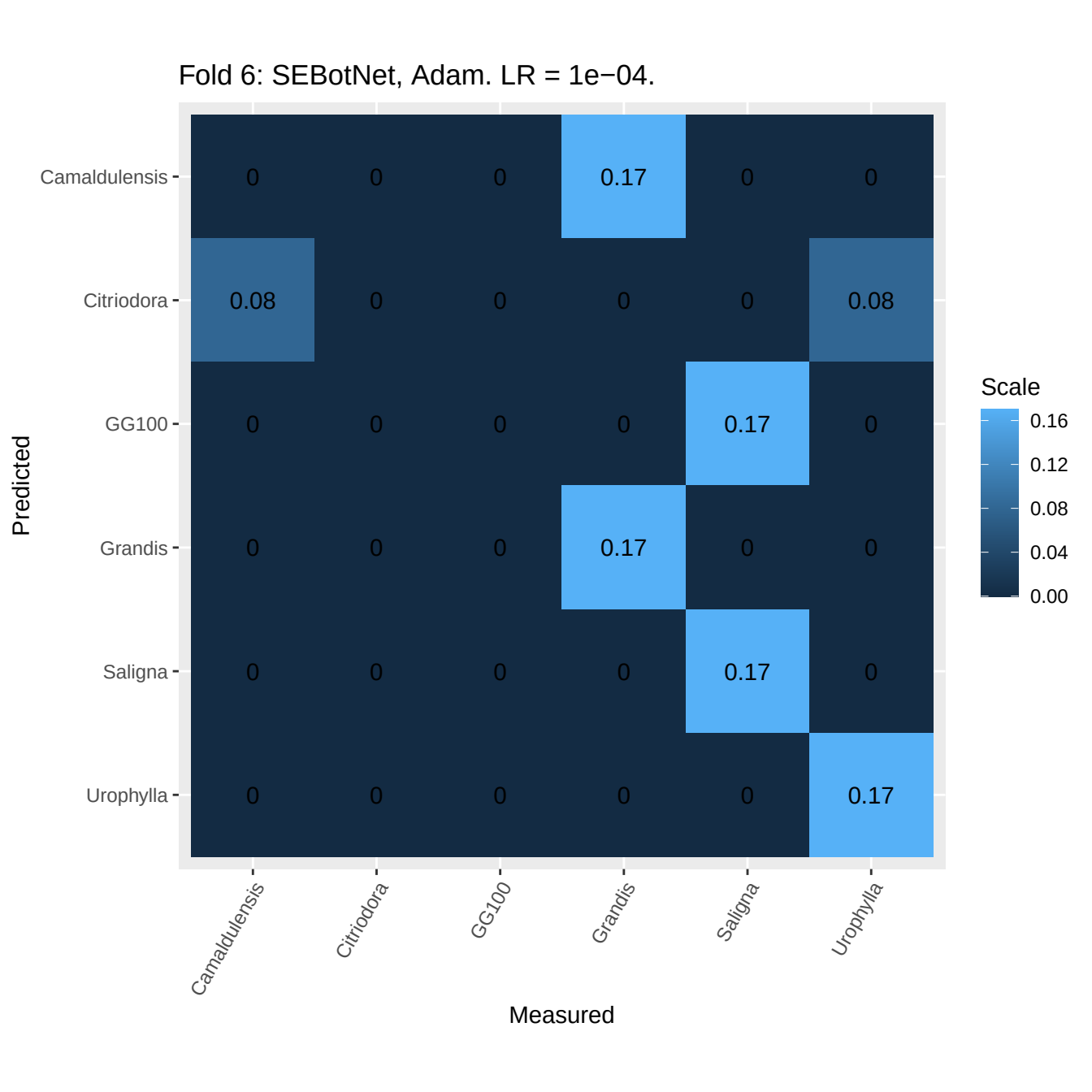

Fold 1: SEBotNet, Adam. LR = 1e−04.
Camaldulensis
Citriodora
GG100
Grandis
Saligna
Urophylla
Predicted
Measured
Scale
0.16
0.12
0.08
0.04
0.00
0 0 0 0.08 0 0.08
0.08 0 0 0.08 0 0
0.08 0 0.08 0 0 0
0 0 0 0.17 0 0
0 0.08 0 0 0.08 0
0.17 0 0 0 0 0

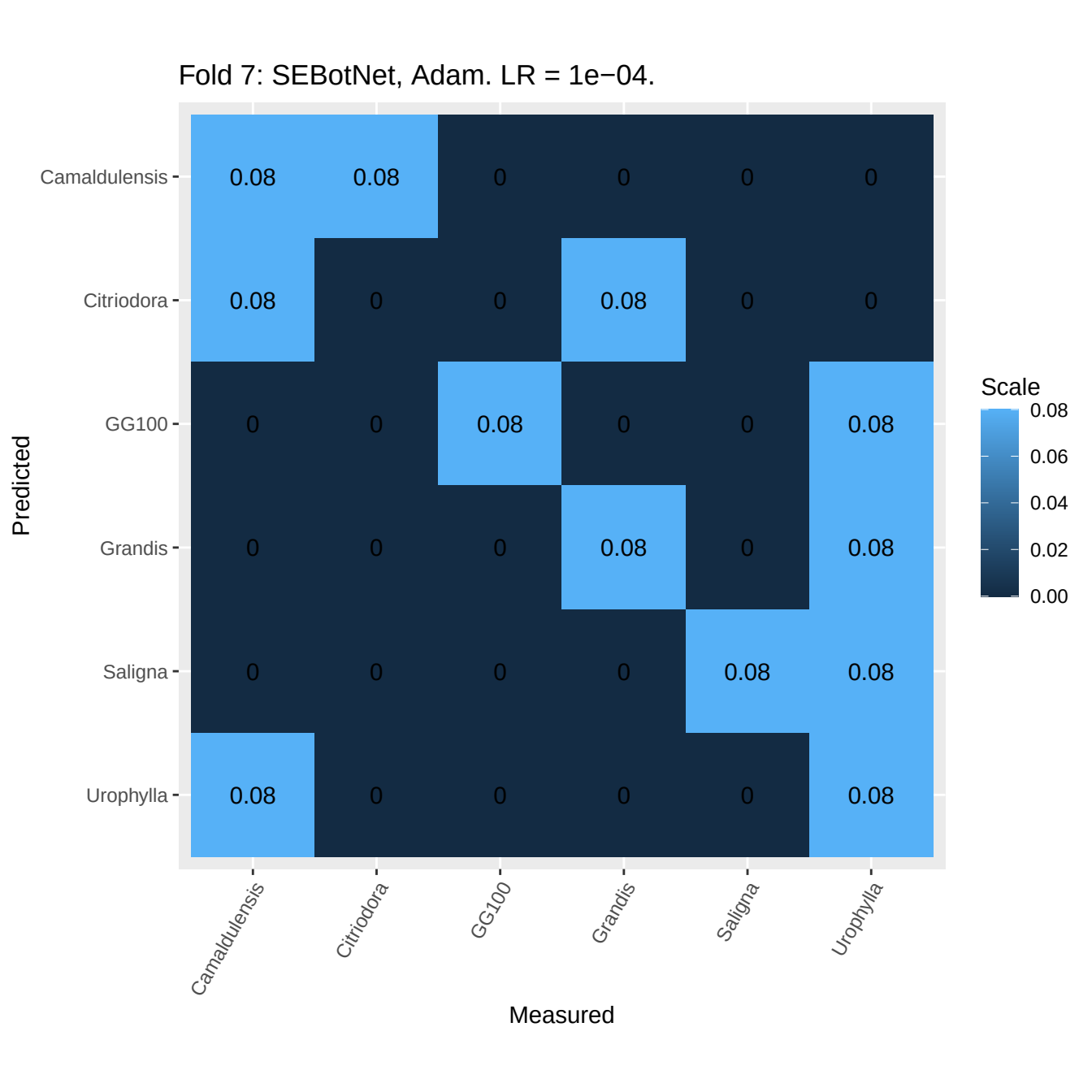

Fold 2: SEBotNet, Adam. LR = 1e−04.
Camaldulensis
Citriodora
GG100
Grandis
Saligna
Urophylla
Predicted
Measured
0.08 0.08 0 0 0 0
0.08 0 0.08 0 0 0
0 0 0.08 0 0 0.08
0 0 0 0.08 0.08 0
0 0 0.08 0 0.08 0
0 0 0 0 0.08 0.08
Scale
0.08
0.06
0.04
0.02
0.00

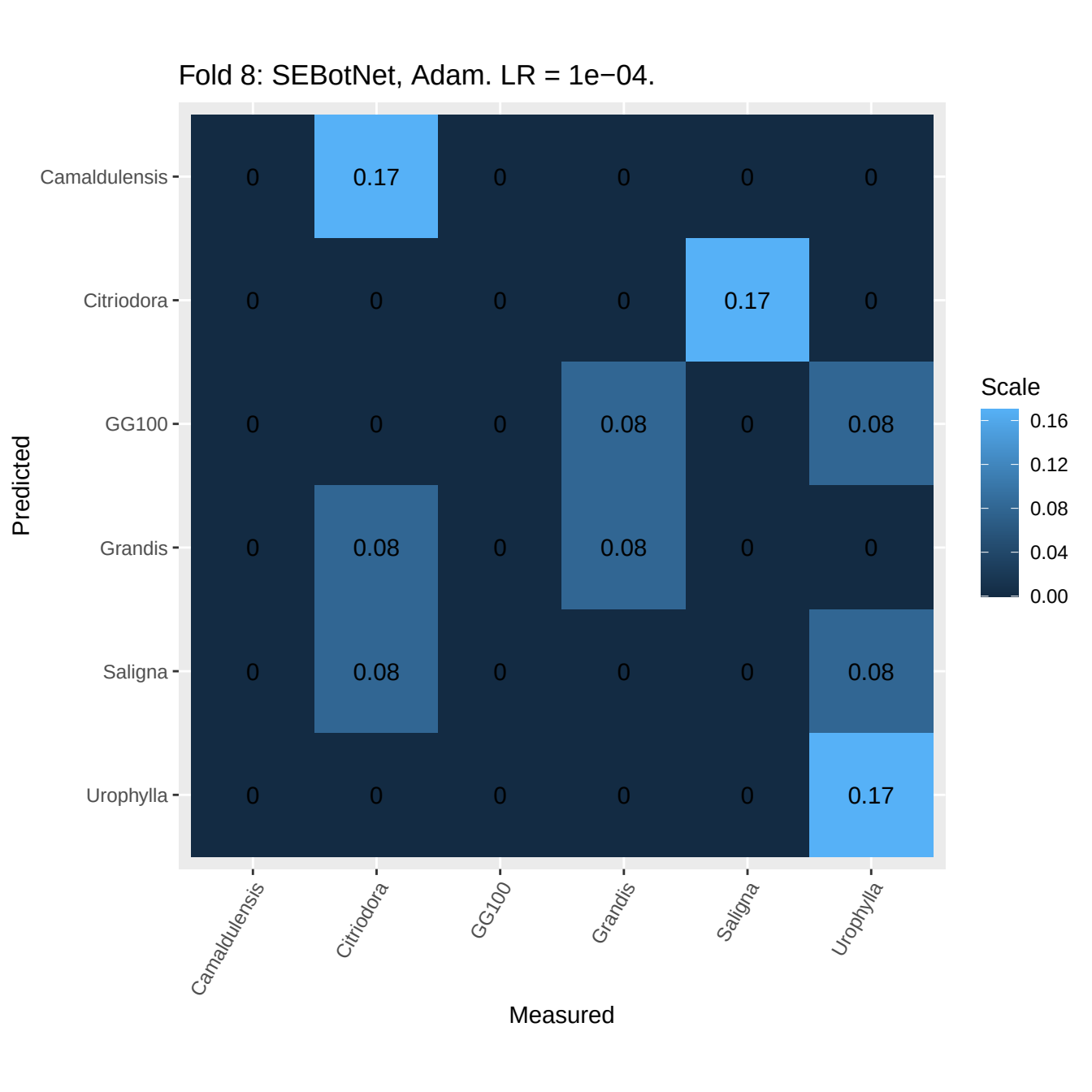

Fold 3: SEBotNet, Adam. LR = 1e−04.
Predicted
Camaldulensis
Citriodora
GG100
Grandis
Saligna
Urophylla
0.08 0 0 0 0.08 0
0.08 0 0 0 0 0.08
0 0 0.08 0 0.08 0
0 0 0.17 0 0 0
0.08 0 0.08 0 0 0
0.08 0 0.08 0 0 0
Measured
Camaldulensis
Citriodora
GG100
Grandis
Saligna
Urophylla
Scale
0.16
0.12
0.08
0.04
0.00

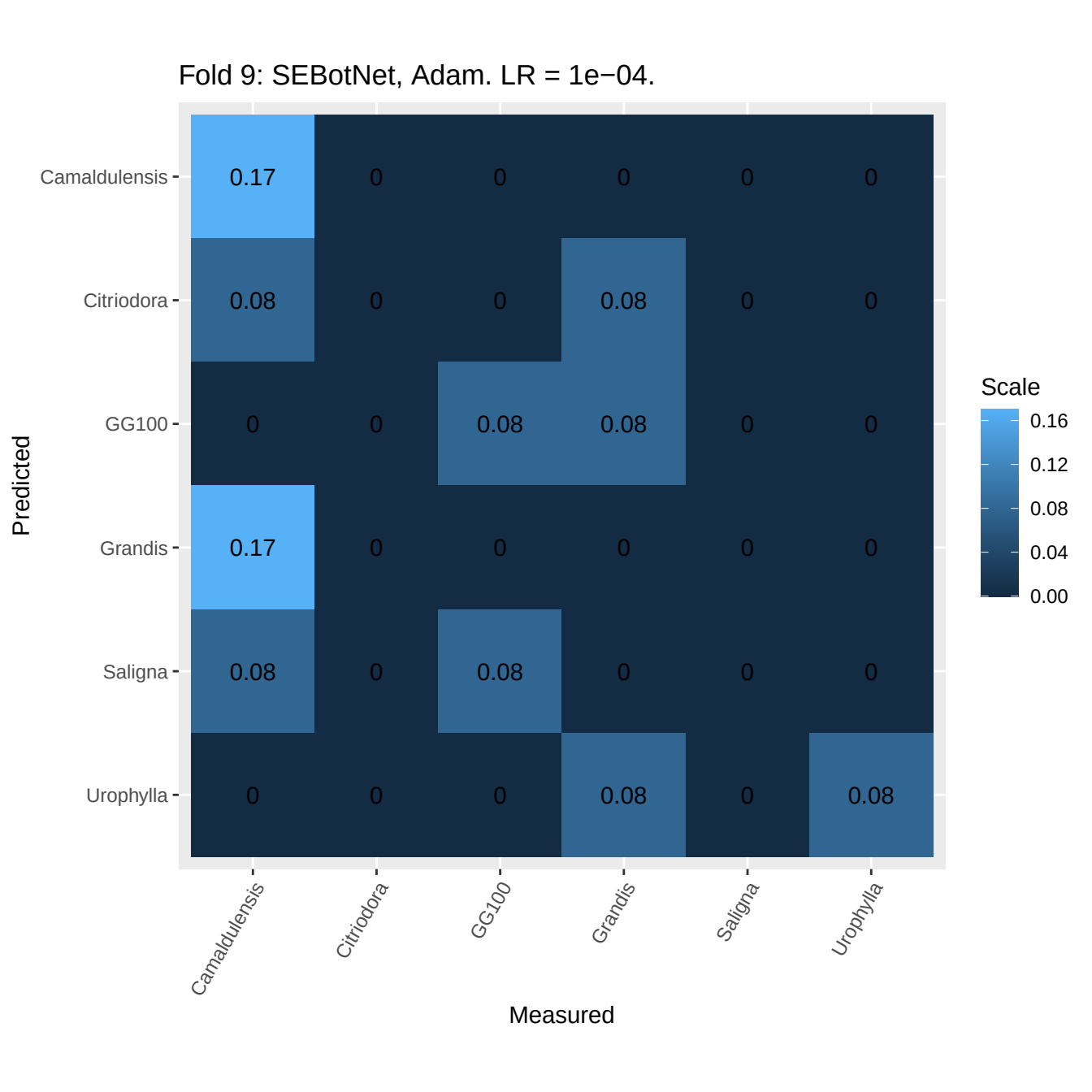

Fold 4: SEBotNet, Adam. LR = 1e−04.
Camaldulensis
Citriodora
GG100
Grandis
Saligna
Urophylla
Predicted
0.08 0 0 0 0 0.08
0 0.08 0 0 0.08 0
0 0 0.08 0 0 0.08
0.17 0 0 0 0 0
0 0 0.08 0 0.08 0
0.08 0 0.08 0 0 0
Camaldulensis
Citriodora
GG100
Grandis
Saligna
Urophylla
Measured
Scale
0.16
0.12
0.08
0.04
0.00

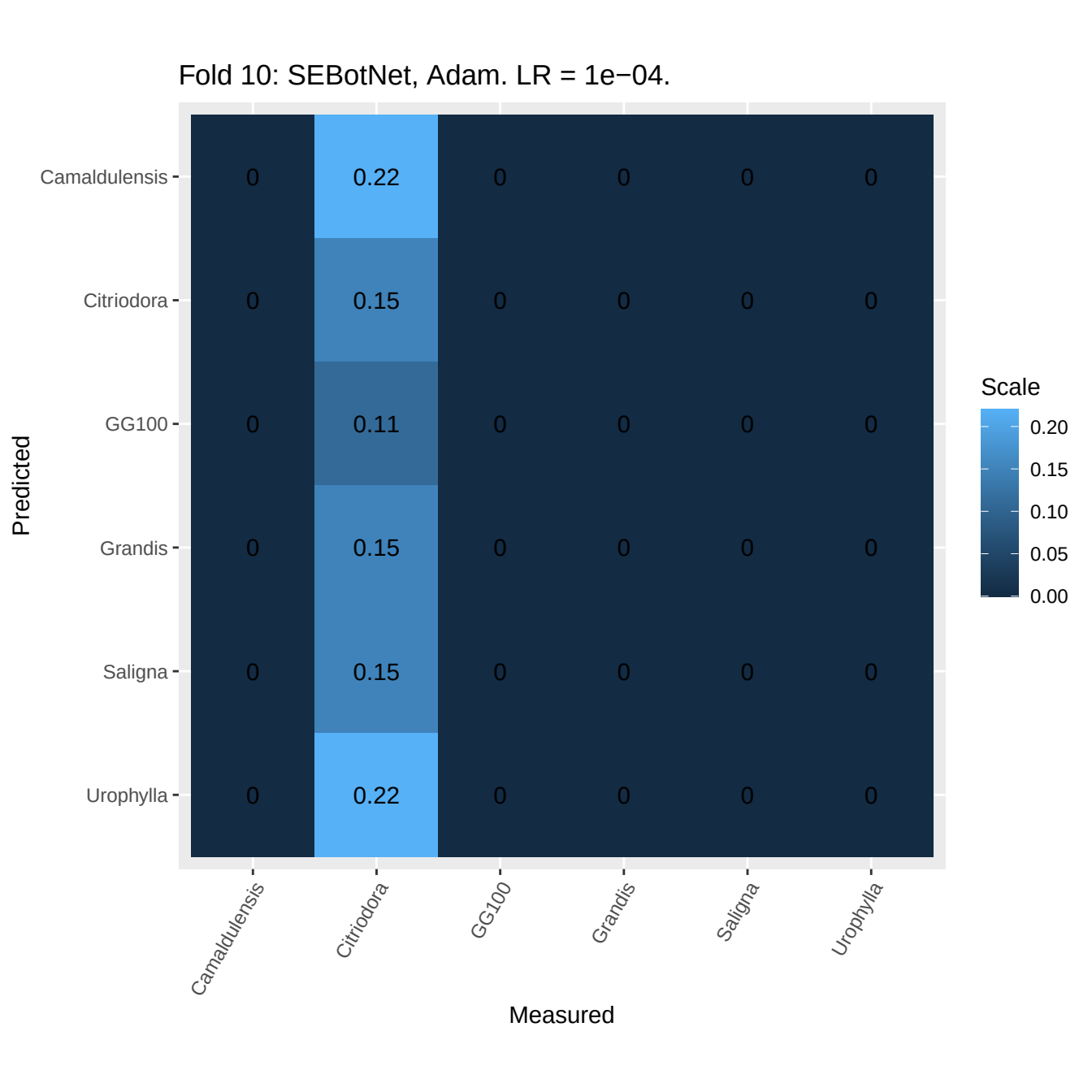

Fold 5: SEBotNet, Adam. LR = 1e−04.
Camaldulensis
Citriodora
GG100
Grandis
Saligna
Urophylla
Predicted
Measured
0.17 0 0 0 0 0
0.17 0 0 0 0 0
0.08 0 0.08 0 0 0
0 0 0 0.08 0.08 0
0 0 0.08 0 0.08 0
0.08 0 0 0 0 0.08
Scale
0.16
0.12
0.08
0.04
0.00

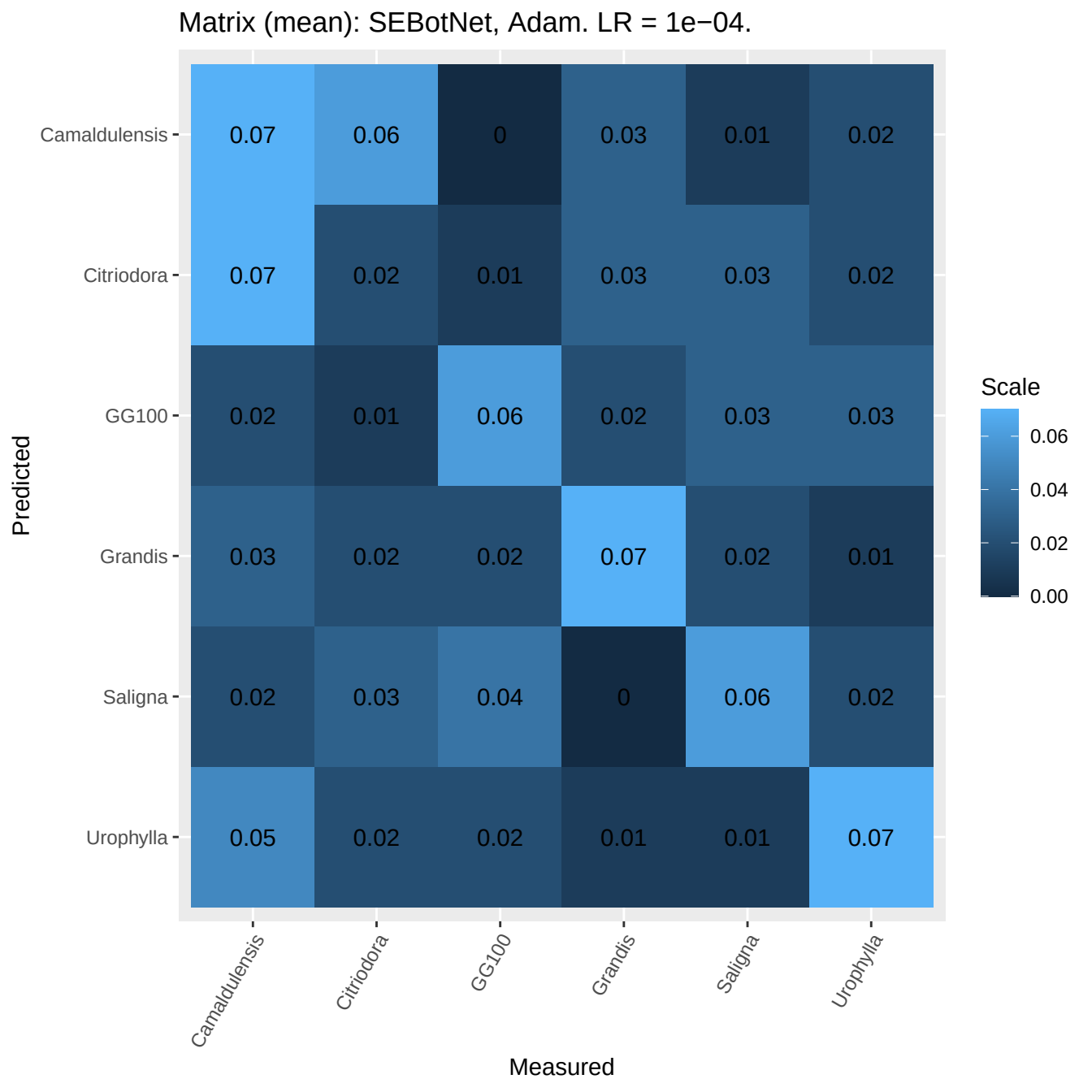

Fold 6: SEBotNet, Adam. LR = 1e−04.
Camaldulensis
Citriodora
GG100
Grandis
Saligna
Urophylla
Predicted
Measured
Scale
0.16
0.12
0.08
0.04
0.00
0 0 0 0.17 0 0
0.08 0 0 0 0 0.08
0 0 0 0 0.17 0
0 0 0 0.17 0 0
0 0 0 0 0.17 0
0 0 0 0 0 0.17

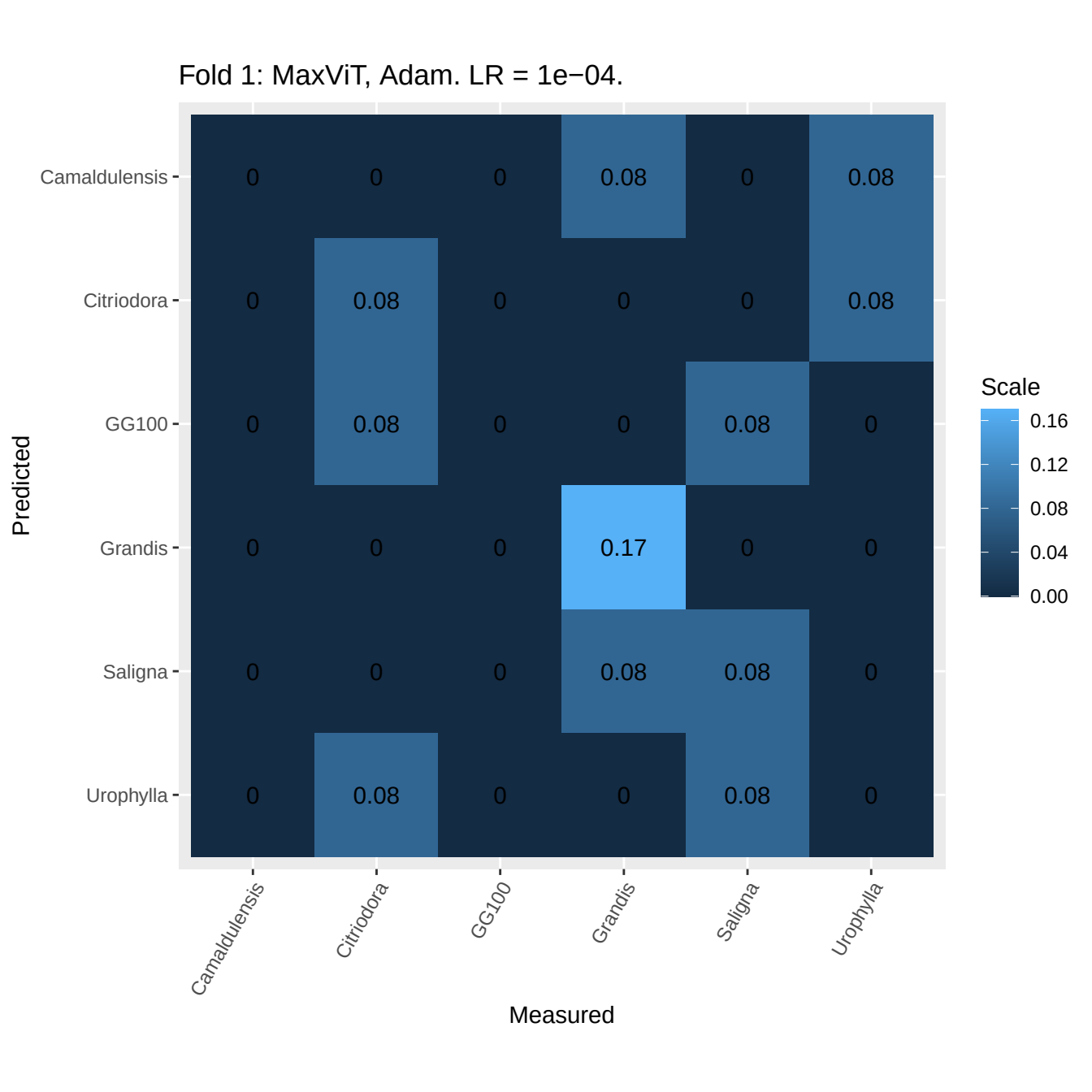

Fold 7: SEBotNet, Adam. LR = 1e−04.
Predicted
Camaldulensis
Citriodora
GG100
Grandis
Saligna
Urophylla
0.08 0.08 0 0 0 0
0.08 0 0 0.08 0 0
0 0 0.08 0 0 0.08
0 0 0 0.08 0 0.08
0 0 0 0 0.08 0.08
0.08 0 0 0 0 0.08
Measured
Camaldulensis
Citriodora
GG100
Grandis
Saligna
Urophylla
Scale
0.08
0.06
0.04
0.02
0.00

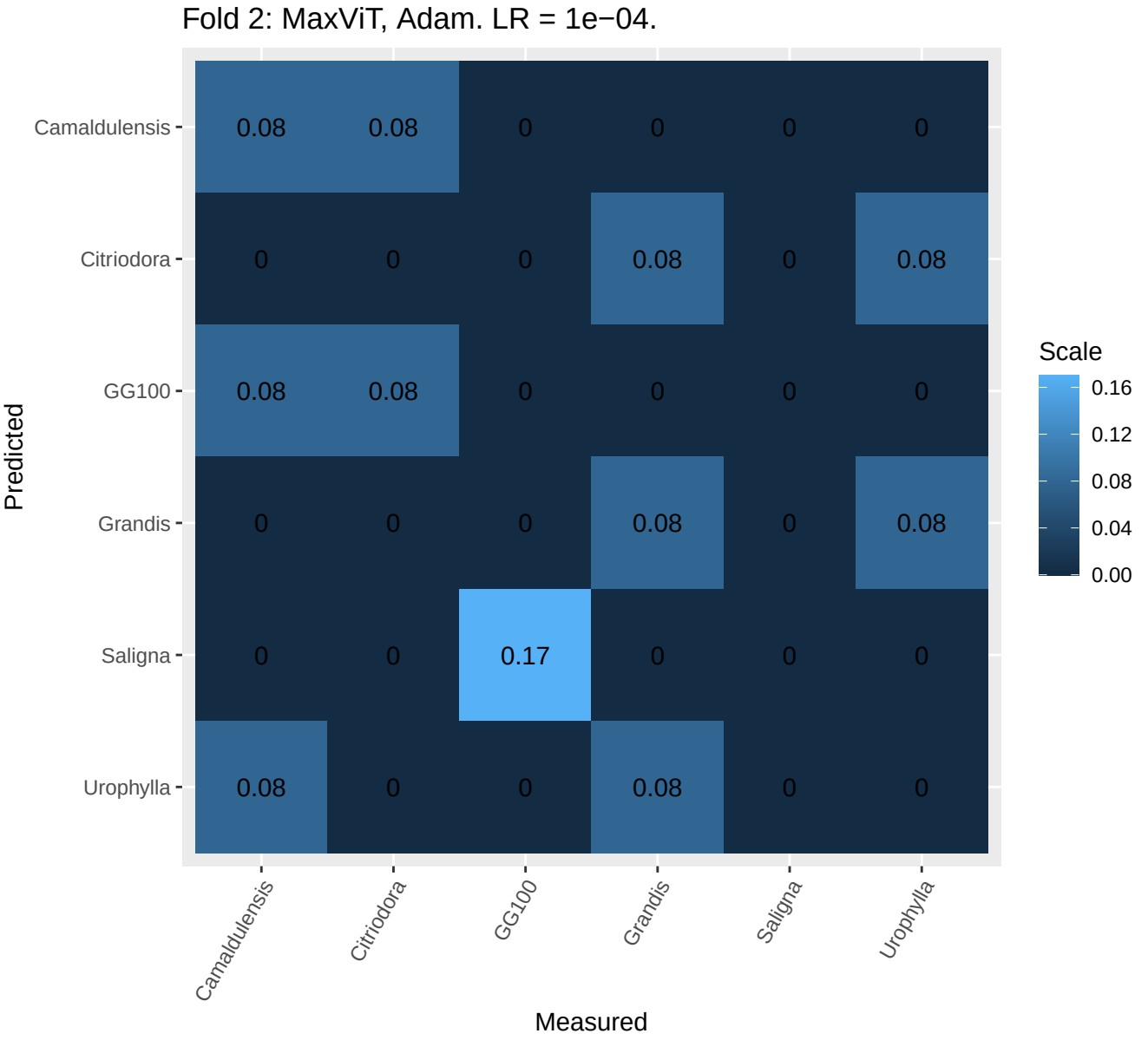

Fold 8: SEBotNet, Adam. LR = 1e−04.
Camaldulensis
Citriodora
GG100
Grandis
Saligna
Urophylla
Predicted
Measured
Scale
0.16
0.12
0.08
0.04
0.00
0 0.17 0 0 0 0
0 0 0 0 0.17 0
0 0 0 0.08 0 0.08
0 0.08 0 0.08 0 0
0 0.08 0 0 0 0.08
0 0 0 0 0 0.17

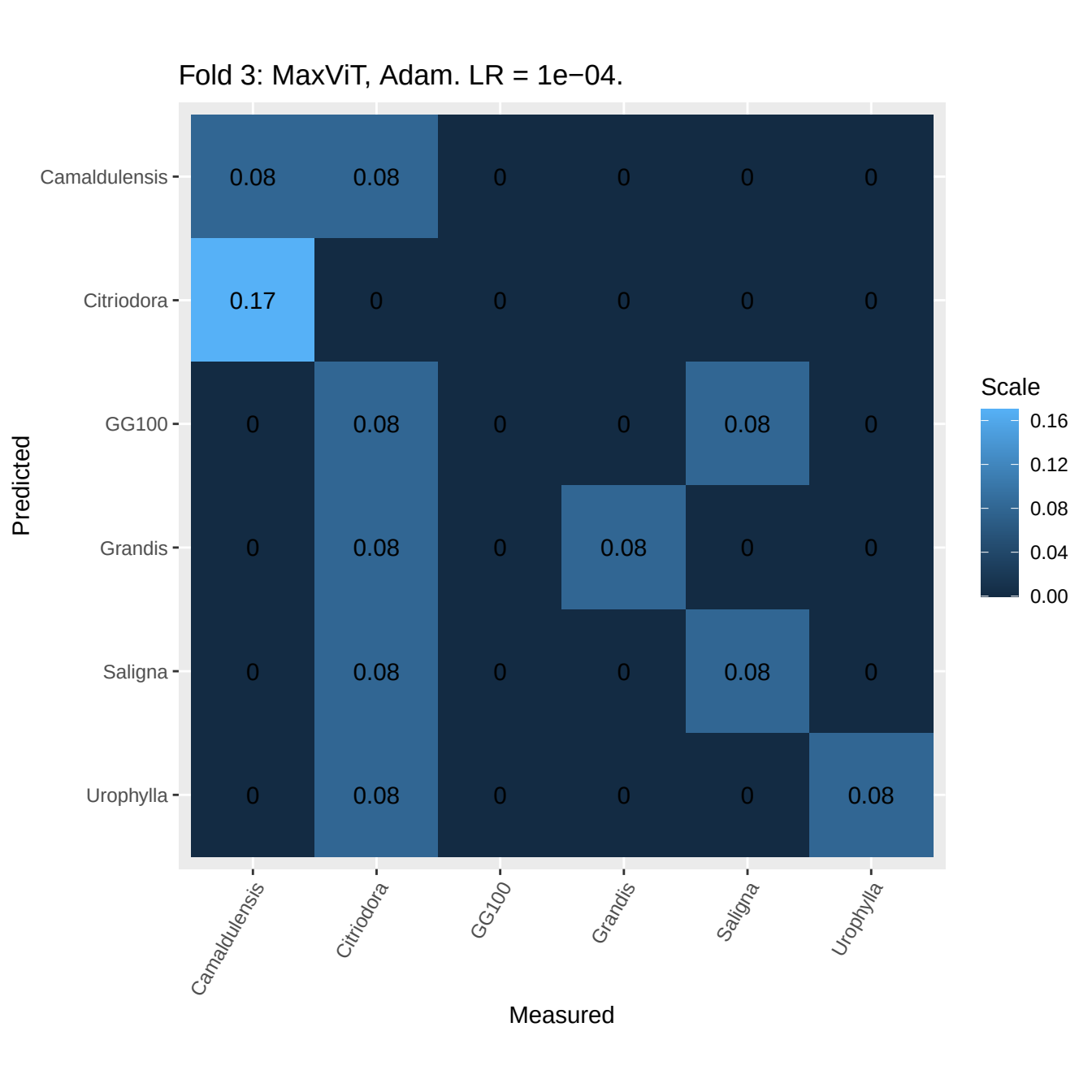

Fold 9: SEBotNet, Adam. LR = 1e−04.
Predicted
Camaldulensis
Citriodora
GG100
Grandis
Saligna
Urophylla
0.17 0 0 0 0 0
0.08 0 0 0.08 0 0
0 0 0.08 0.08 0 0
0.17 0 0 0 0 0
0.08 0 0.08 0 0 0
0 0 0 0.08 0 0.08
Measured
Camaldulensis
Citriodora
GG100
Grandis
Saligna
Urophylla
Scale
0.16
0.12
0.08
0.04
0.00

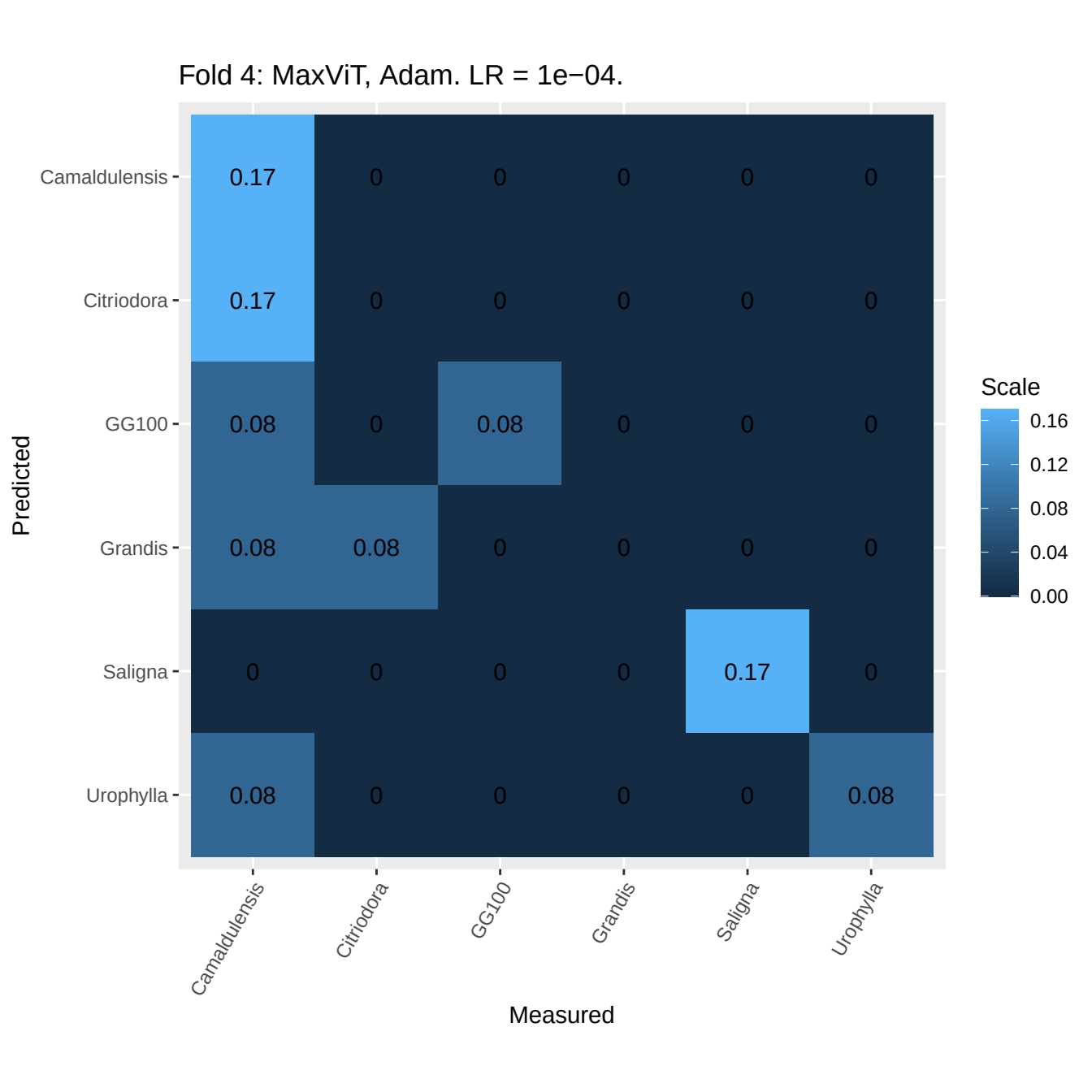

Fold 10: SEBotNet, Adam. LR = 1e−04.
Predicted
Camaldulensis
Citriodora
GG100
Grandis
Saligna
Urophylla
0
0.22
0.15
0.11
Measured
Scale
0.20
0.15
0.10
0.05
0.00

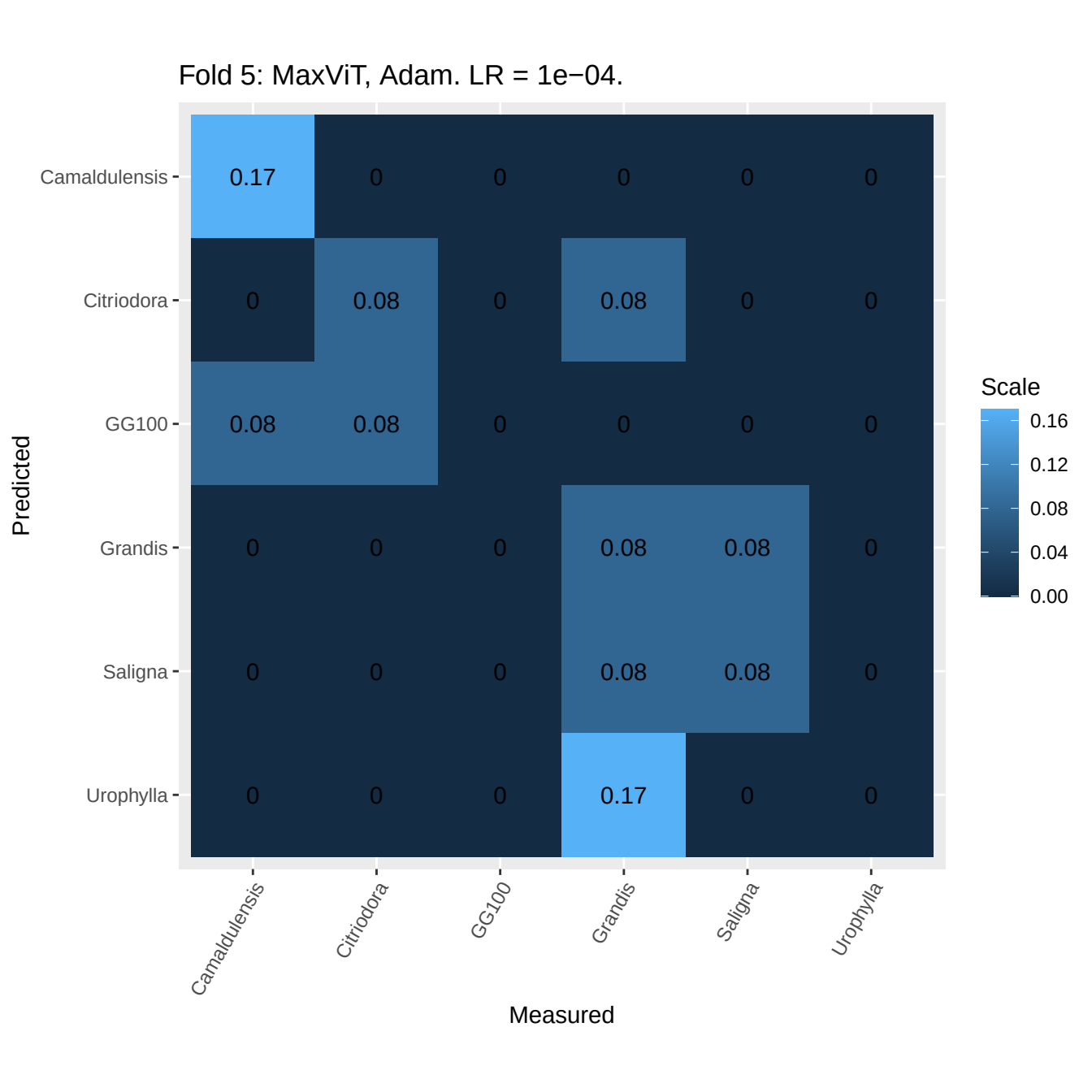

Matrix (mean): SEBotNet, Adam. LR = 1e−04.
Predicted
Measured
Camaldulensis
Citriodora
GG100
Grandis
Saligna
Urophylla
0.07 0.06 0 0.03 0.01 0.02
0.07 0.02 0.01 0.03 0.03 0.02
0.02 0.01 0.06 0.02 0.03 0.03
0.03 0.02 0.02 0.07 0.02 0.01
0.02 0.03 0.04 0 0.06 0.02
0.05 0.02 0.02 0.01 0.01 0.07
Scale
0.06
0.04
0.02
0.00

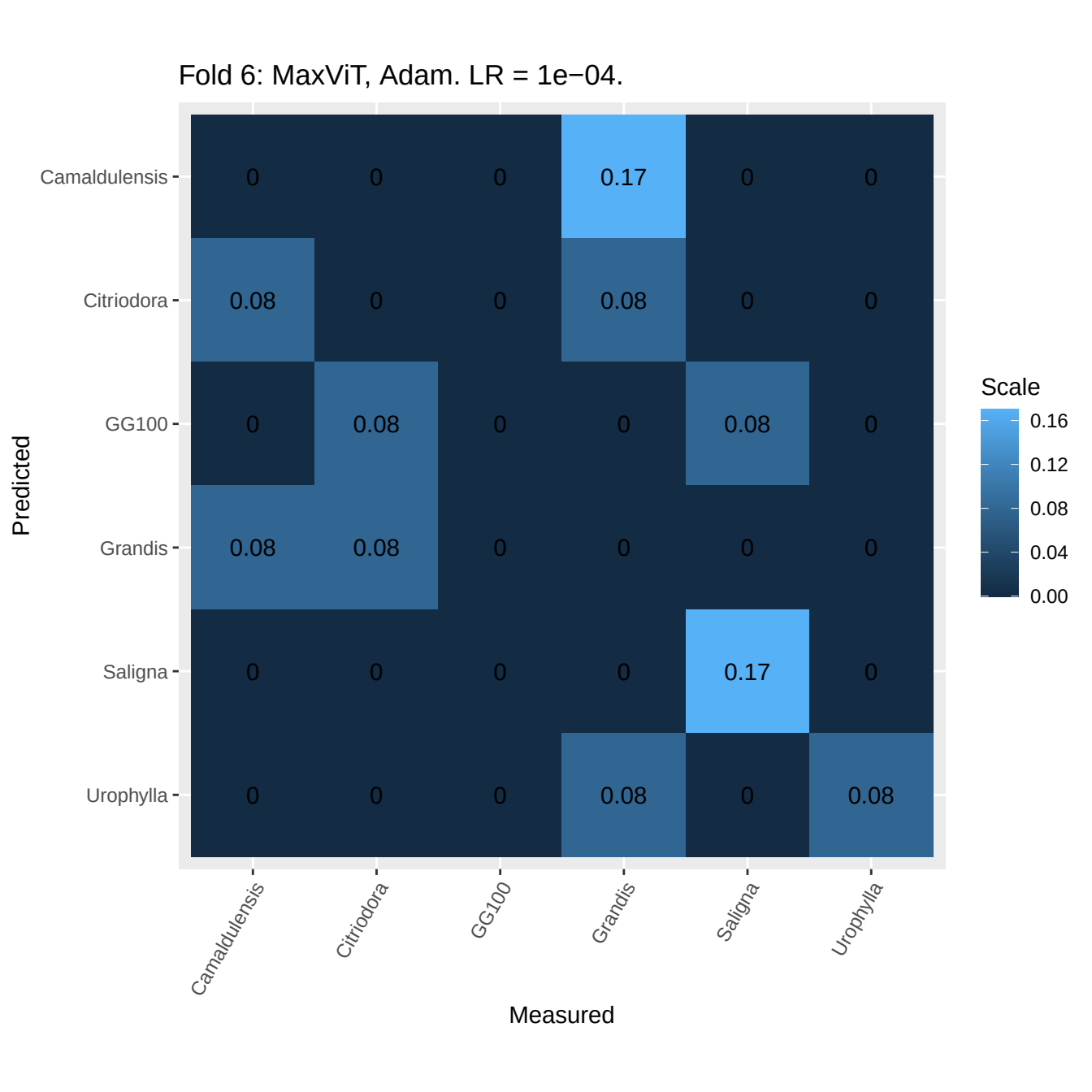

Fold 1: MaxViT, Adam. LR = 1e−04.
Camaldulensis
Citriodora
GG100
Grandis
Saligna
Urophylla
Predicted
Measured
Scale
0.16
0.12
0.08
0.04
0.00
0 0 0 0.08 0 0.08
0 0.08 0 0 0 0.08
0 0.08 0 0 0.08 0
0 0 0 0.17 0 0
0 0 0 0.08 0.08 0
0 0.08 0 0 0.08 0

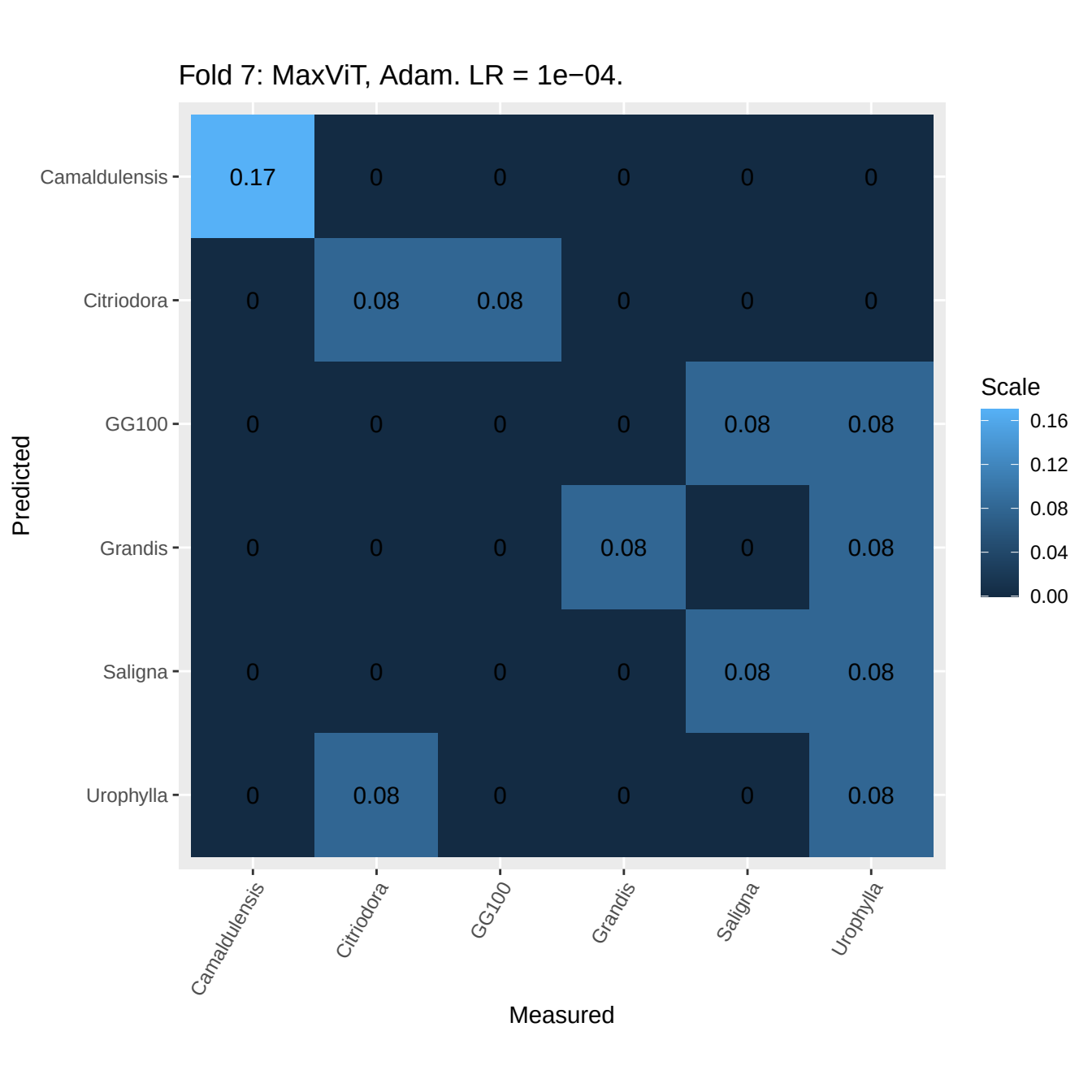

Fold 2: MaxViT, Adam. LR = 1e−04.
Camaldulensis
Citriodora
GG100
Grandis
Saligna
Urophylla
Predicted
Measured
0.08 0.08 0 0 0 0
0 0 0 0.08 0 0.08
0.08 0.08 0 0 0 0
0 0 0 0.08 0 0.08
0 0 0.17 0 0 0
0.08 0 0 0.08 0 0
Scale
0.16
0.12
0.08
0.04
0.00

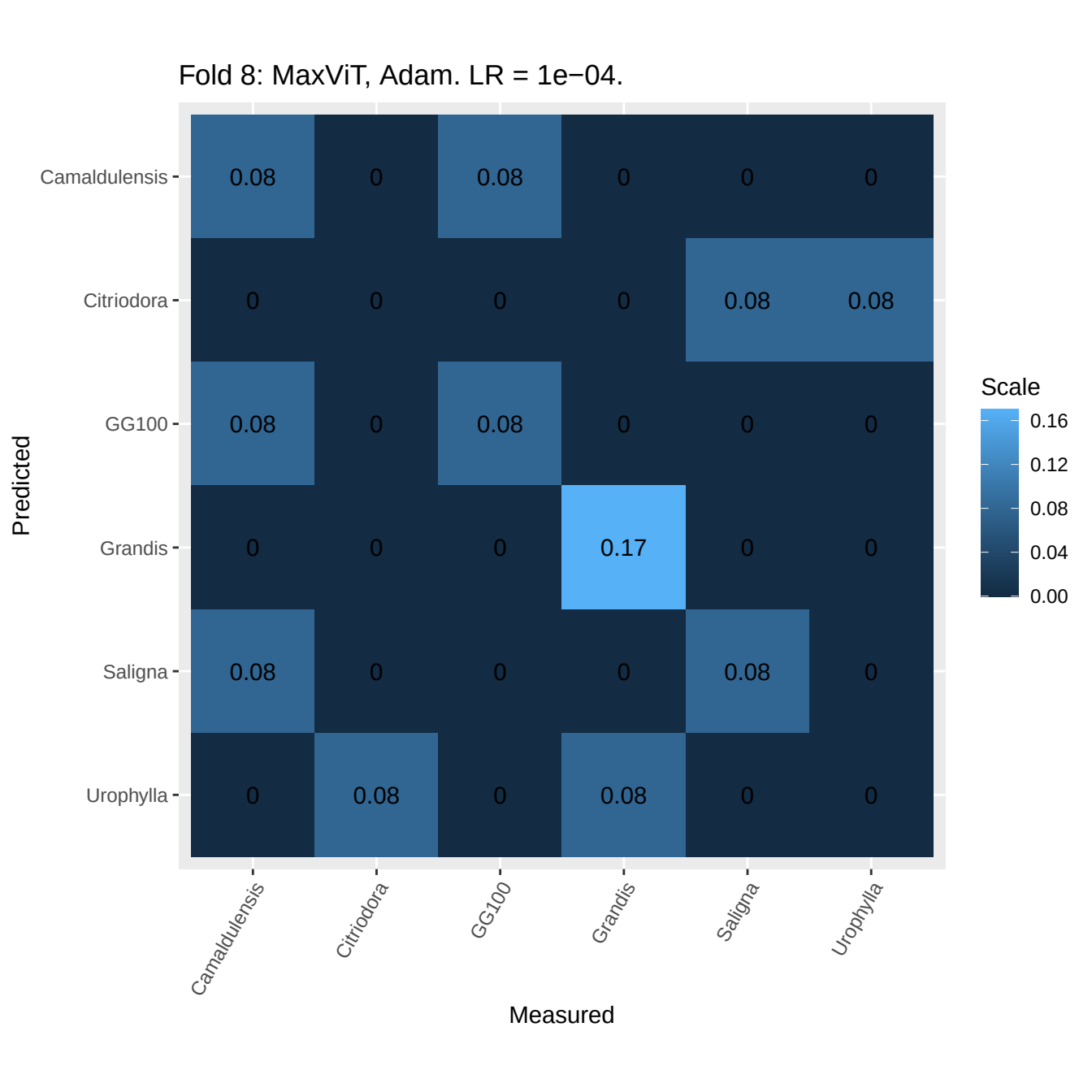

Fold 3: MaxViT, Adam. LR = 1e−04.
Camaldulensis
Citriodora
GG100
Grandis
Saligna
Urophylla
Predicted
Measured
Scale
0.16
0.12
0.08
0.04
0.00
0.08 0.08 0 0 0 0
0.17 0 0 0 0 0
0 0.08 0 0 0.08 0
0 0.08 0 0.08 0 0
0 0.08 0 0 0.08 0
0 0.08 0 0 0 0.08

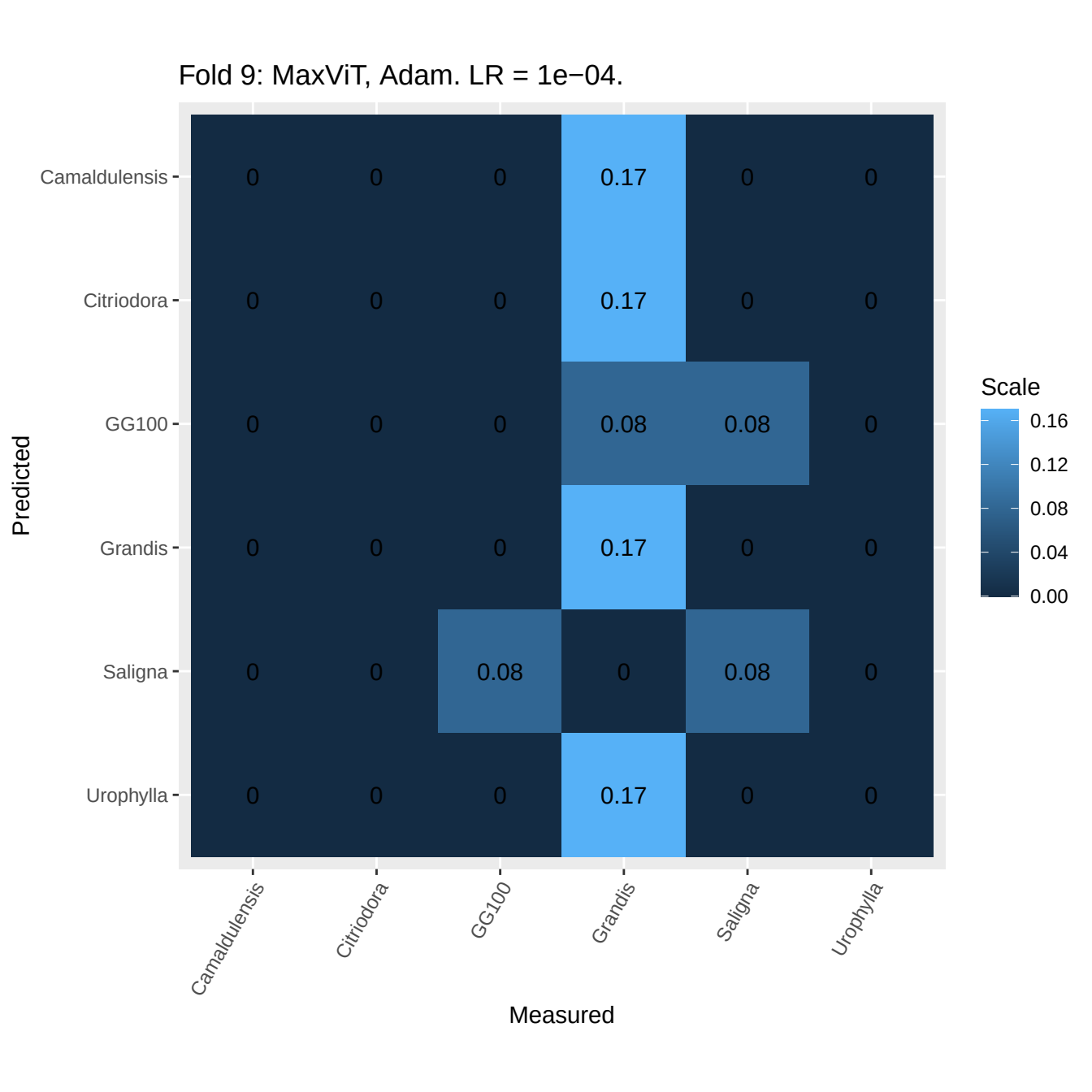

Fold 4: MaxViT, Adam. LR = 1e−04.
Camaldulensis
Citriodora
GG100
Grandis
Saligna
Urophylla
Predicted
0.17 0 0 0 0 0
0.17 0 0 0 0 0
0.08 0 0.08 0 0 0
0.08 0.08 0 0 0 0
0 0 0 0 0.17 0
0.08 0 0 0 0 0.08
Camaldulensis
Citriodora
GG100
Grandis
Saligna
Urophylla
Measured
Scale
0.16
0.12
0.08
0.04
0.00

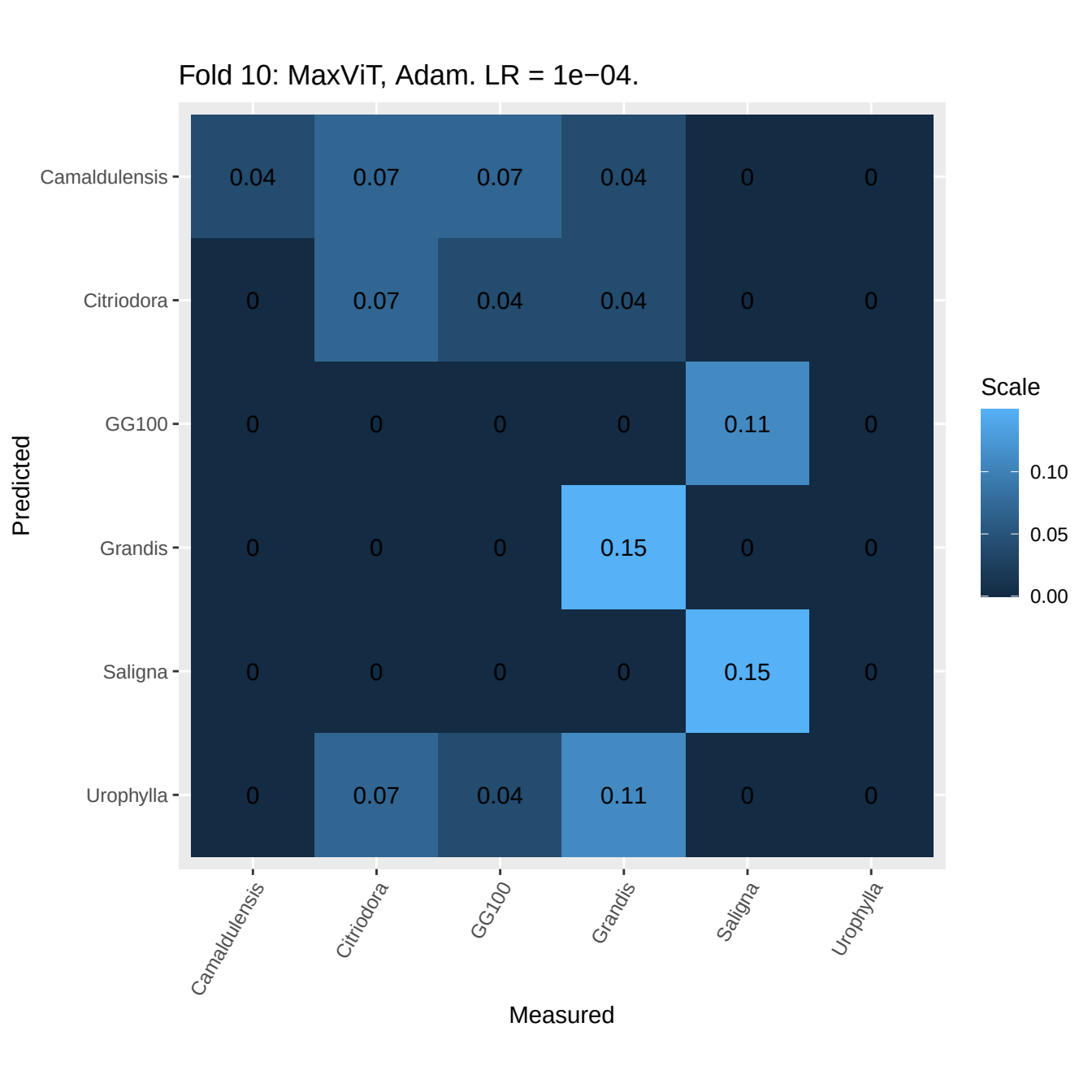

Fold 5: MaxViT, Adam. LR = 1e−04.
Camaldulensis
Citriodora
GG100
Grandis
Saligna
Urophylla
Predicted
Measured
Scale
0.16
0.12
0.08
0.04
0.00
0.17 0 0 0 0 0
0 0.08 0 0.08 0 0
0.08 0.08 0 0 0 0
0 0 0 0.08 0.08 0
0 0 0 0.08 0.08 0
0 0 0 0.17 0 0

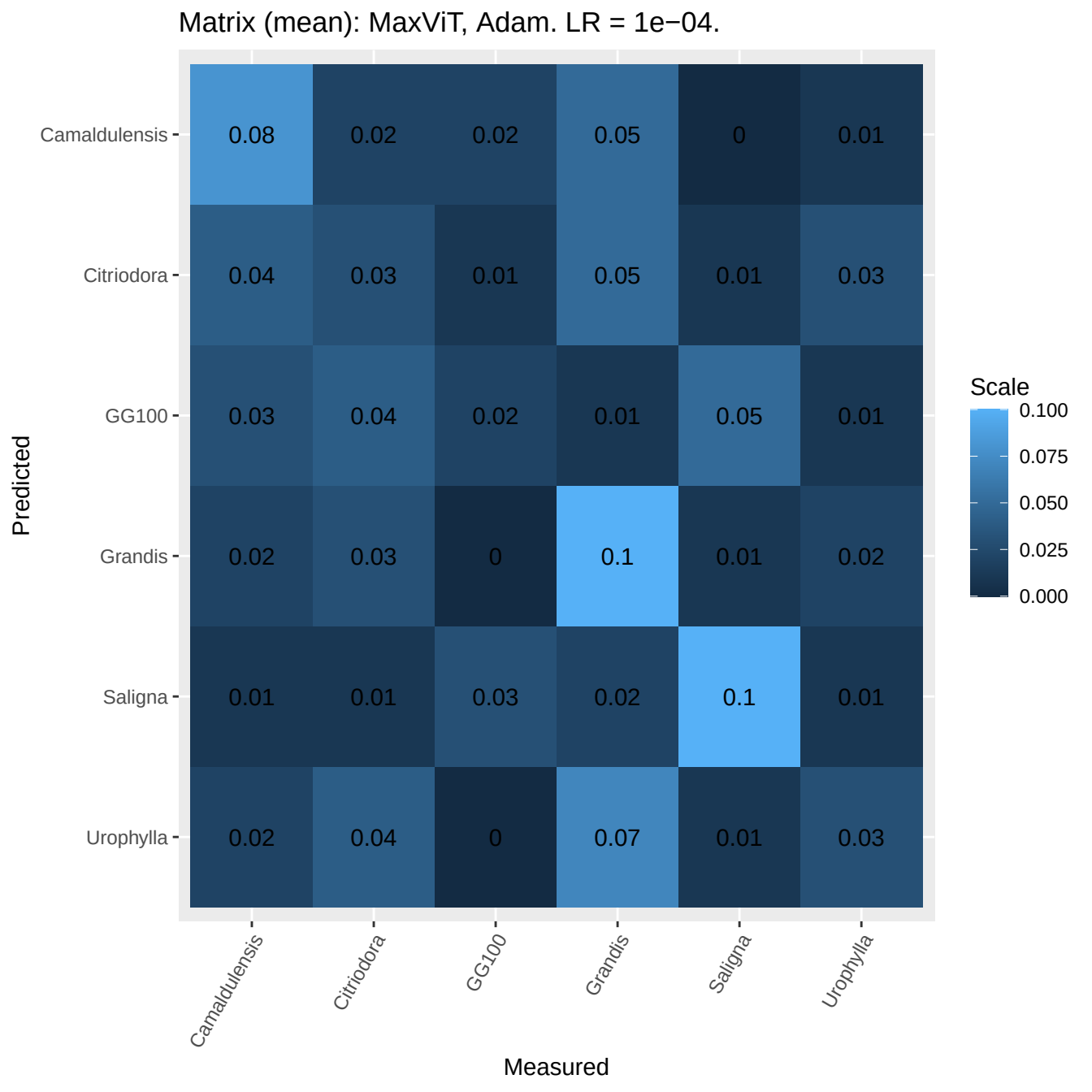

Fold 6: MaxViT, Adam. LR = 1e−04.
Camaldulensis
Citriodora
GG100
Grandis
Saligna
Urophylla
Predicted
0 0 0 0.17 0 0
0.08 0 0 0.08 0 0
0 0.08 0 0 0.08 0
0.08 0.08 0 0 0 0
0 0 0 0 0.17 0
0 0 0 0.08 0 0.08
Camaldulensis
Citriodora
GG100
Grandis
Saligna
Urophylla
Measured
Scale
0.16
0.12
0.08
0.04
0.00

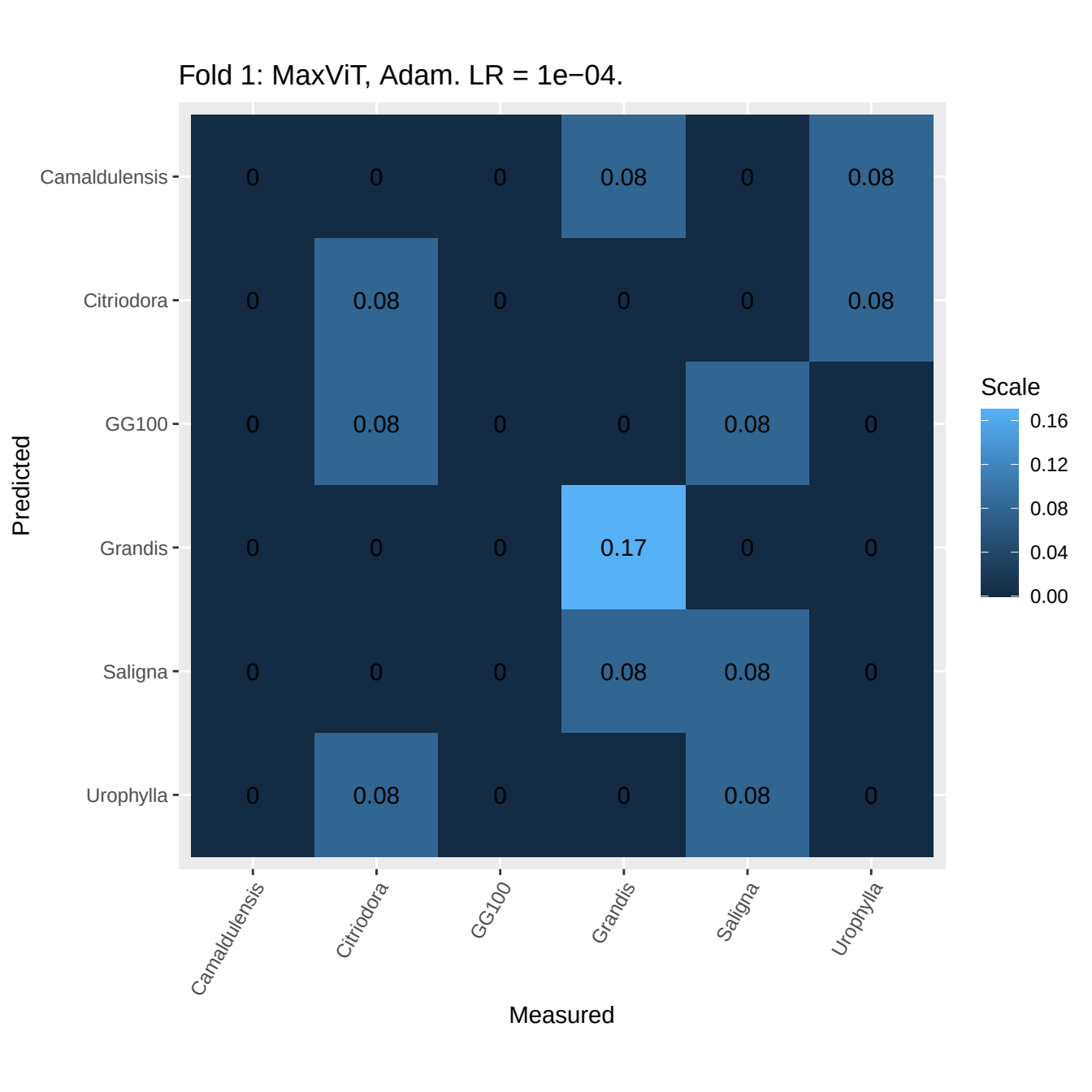

Fold 7: MaxViT, Adam. LR = 1e−04.
Camaldulensis
Citriodora
GG100
Grandis
Saligna
Urophylla
Predicted
Measured
Scale
0.16
0.12
0.08
0.04
0.00
0.17
0.08
0.08
0.08
0.08
0.08
0.08
0.08
0.08
0.08
0.08
0.08
0.08
0.08

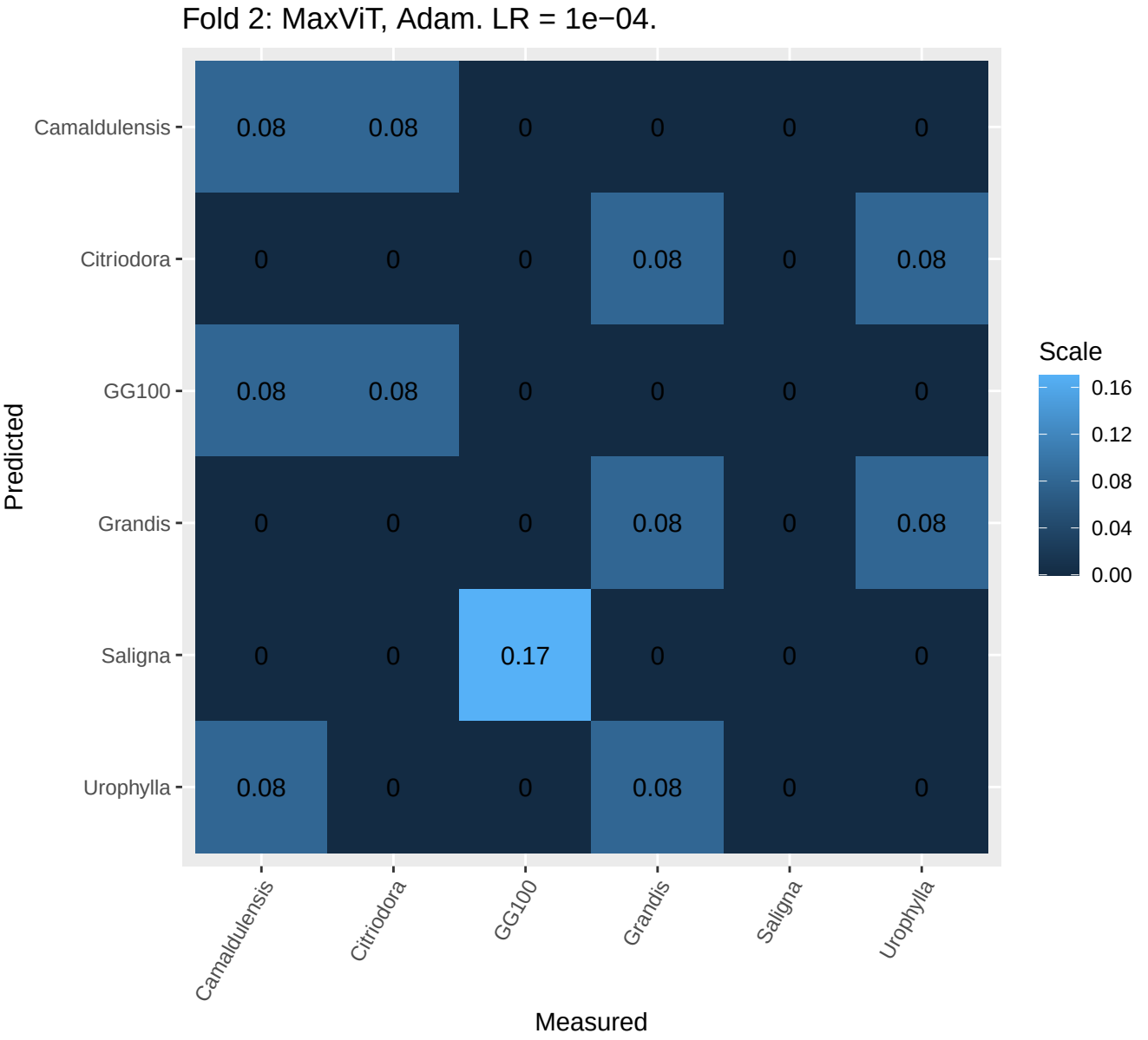

Fold 8: MaxViT, Adam. LR = 1e−04.
Camaldulensis
Citriodora
GG100
Grandis
Saligna
Urophylla
Predicted
Measured
0.08 0 0.08 0 0 0
0 0 0 0 0.08 0.08
0.08 0 0.08 0 0 0
0 0 0 0.17 0 0
0.08 0 0 0 0.08 0
0 0.08 0 0.08 0 0
Scale
0.16
0.12
0.08
0.04
0.00

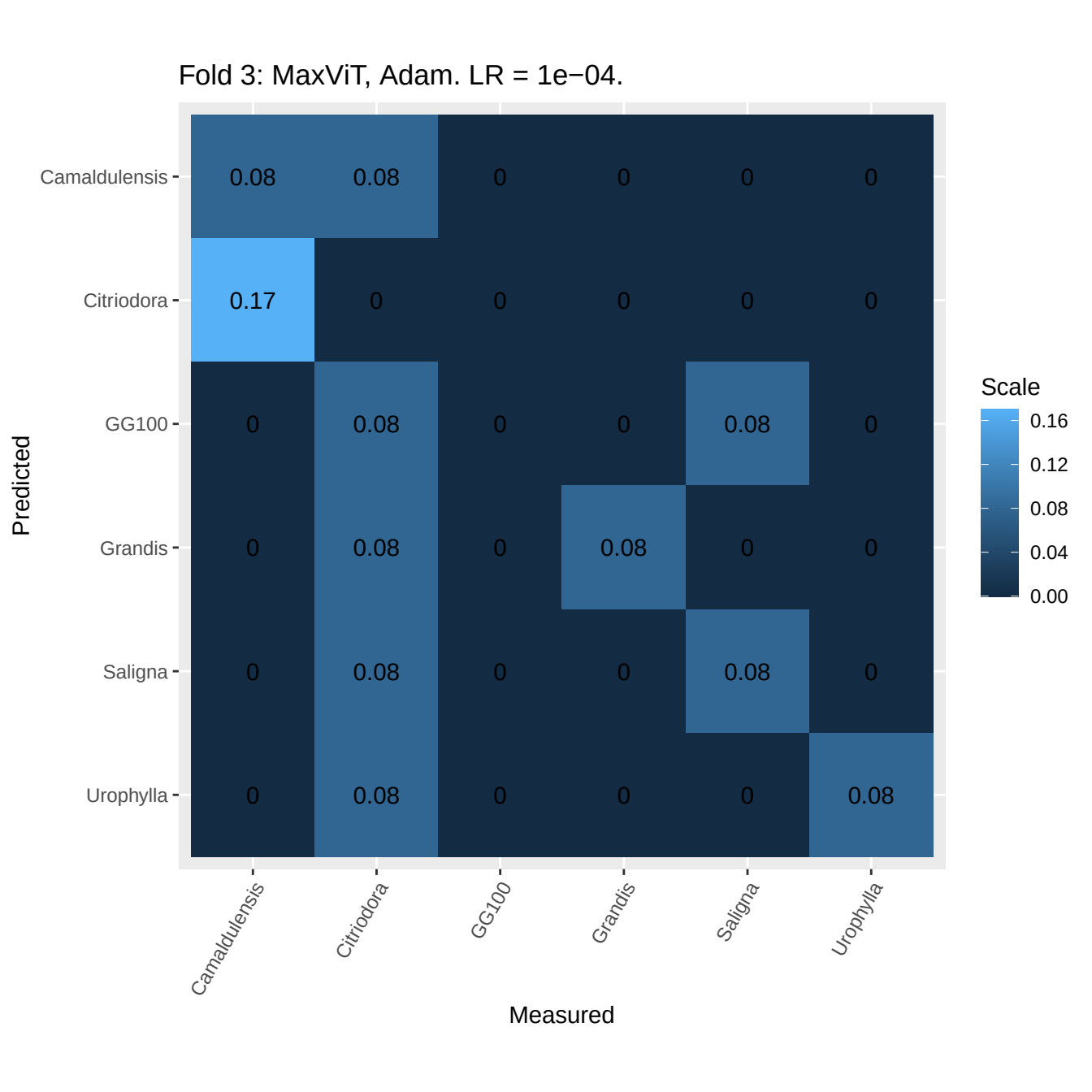

Fold 9: MaxViT, Adam. LR = 1e−04.
Camaldulensis
Citriodora
GG100
Grandis
Saligna
Urophylla
Predicted
Measured
Scale
0.16
0.12
0.08
0.04
0.00
0 0 0 0.17 0 0
0 0 0 0.17 0 0
0 0 0 0.08 0.08 0
0 0 0 0.17 0 0
0 0 0.08 0 0.08 0
0 0 0 0.17 0 0

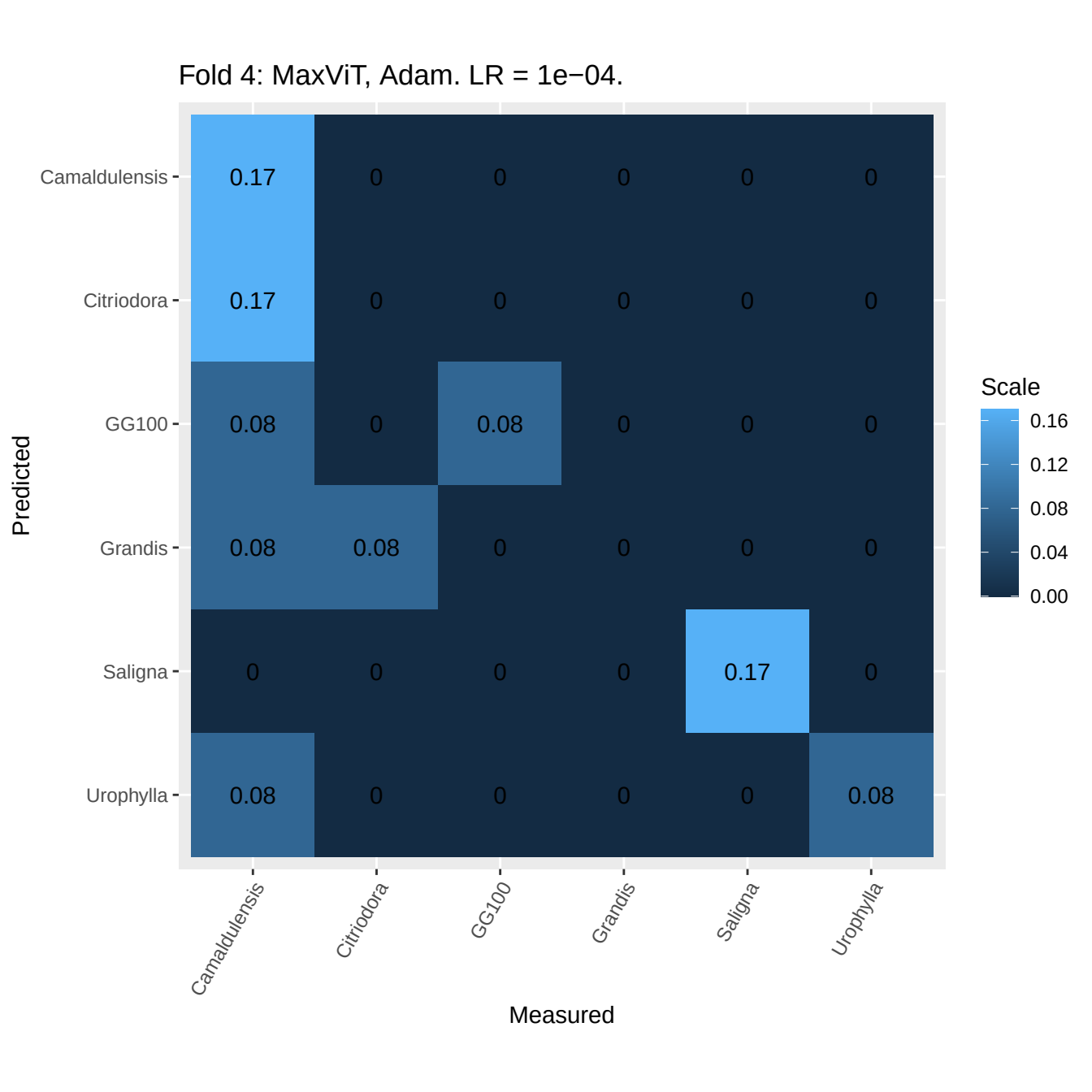

Fold 10: MaxViT, Adam. LR = 1e−04.
Camaldulensis
Citriodora
GG100
Grandis
Saligna
Urophylla
Predicted
0.04 0.07 0.07 0.04 0 0
0 0.07 0.04 0.04 0 0
0 0 0 0 0.11 0
0 0 0 0.15 0 0
0 0 0 0 0.15 0
0 0.07 0.04 0.11 0 0
Camaldulensis
Citriodora
GG100
Grandis
Saligna
Urophylla
Measured
Scale
0.10
0.05
0.00

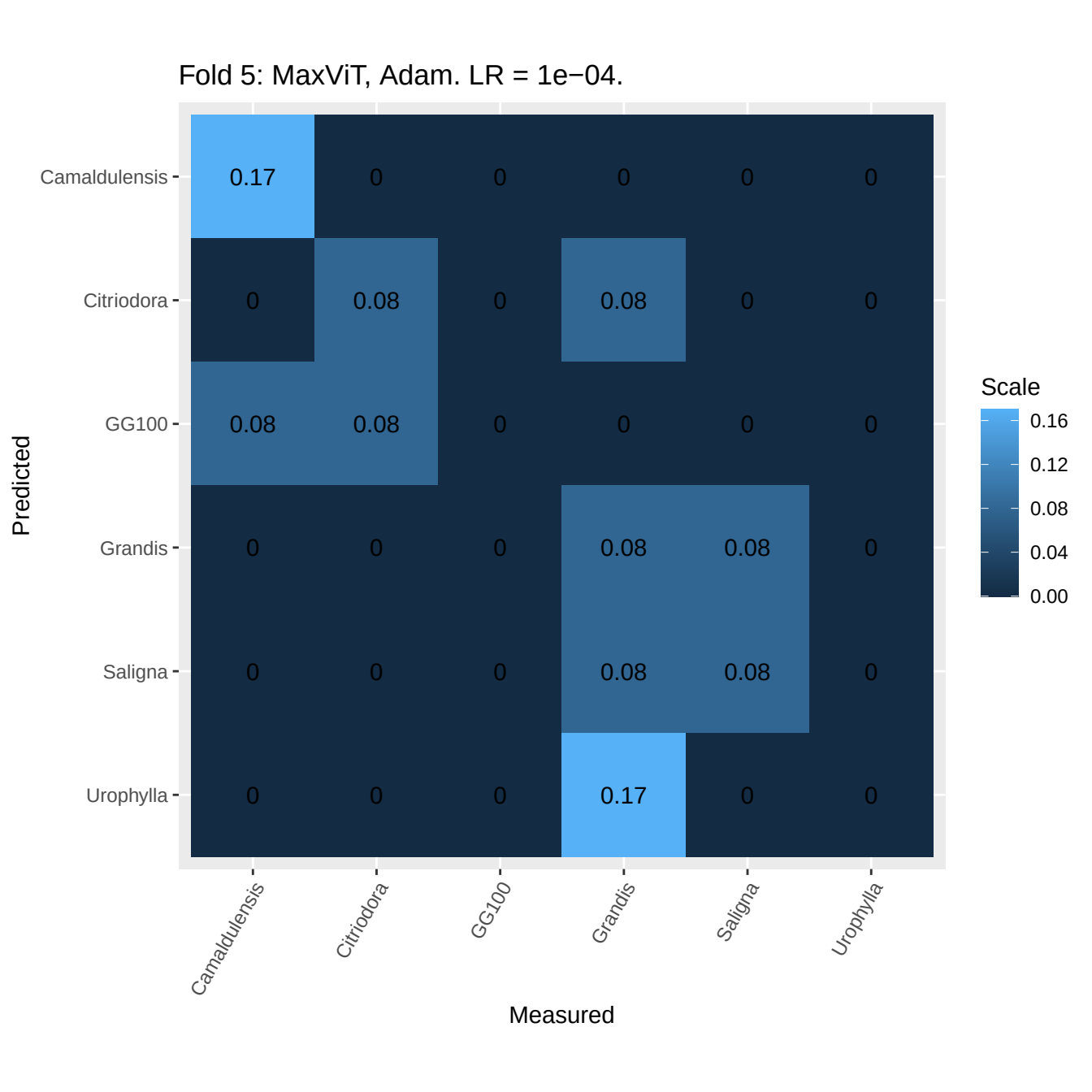

Matrix (mean): MaxViT, Adam. LR = 1e−04.
Predicted
Camaldulensis
Citriodora
GG100
Grandis
Saligna
Urophylla
0.08 0.02 0.02 0.05 0 0.01
0.04 0.03 0.01 0.05 0.01 0.03
0.03 0.04 0.02 0.01 0.05 0.01
0.02 0.03 0 0.1 0.01 0.02
0.01 0.01 0.03 0.02 0.1 0.01
0.02 0.04 0 0.07 0.01 0.03
Camaldulensis
Citriodora
GG100
Grandis
Saligna
Urophylla
Measured
Scale
0.100
0.075
0.050
0.025
0.000

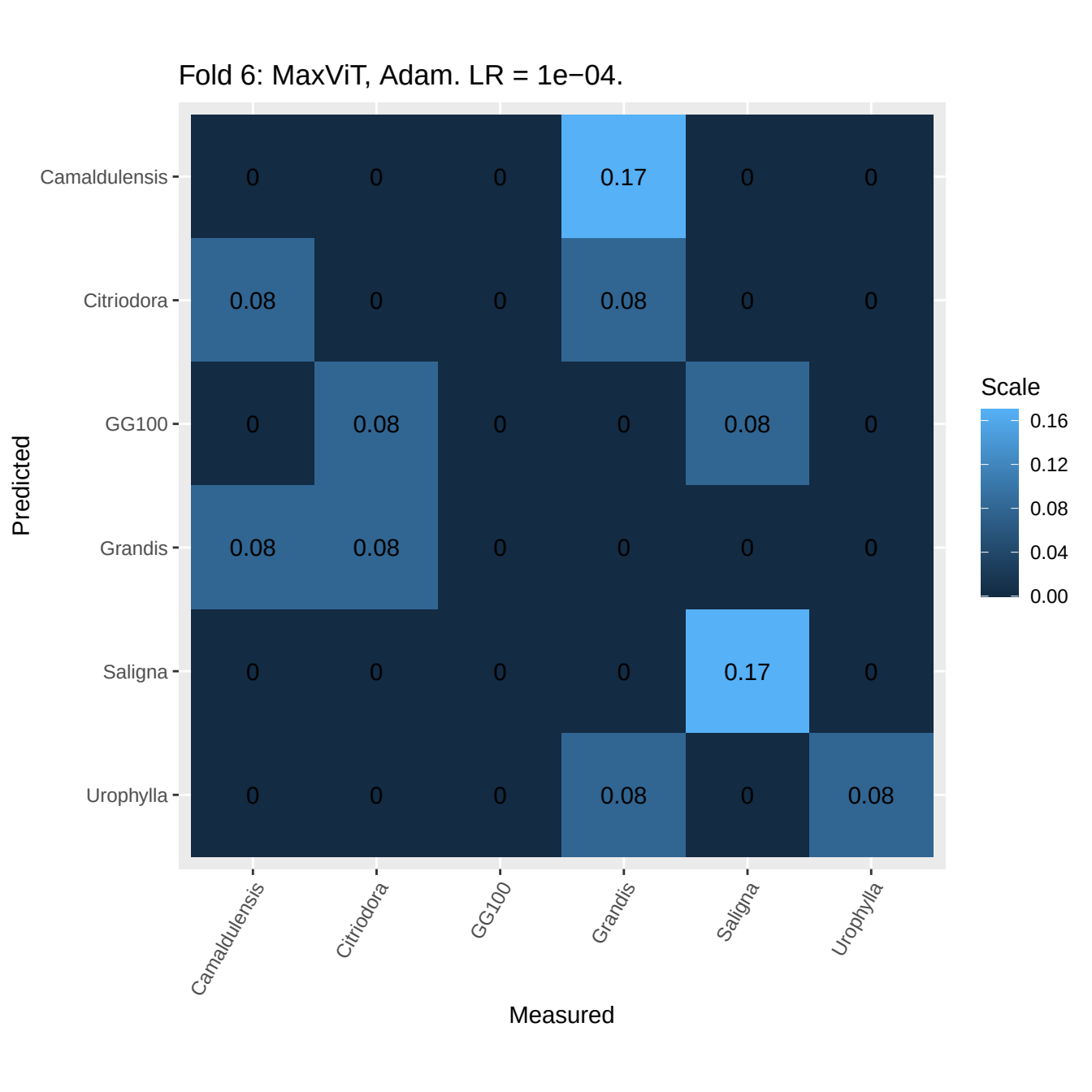

Fold 1: MaxViT, Adam. LR = 1e−04.
Camaldulensis
Citriodora
GG100
Grandis
Saligna
Urophylla
Predicted
Measured
Scale
0.16
0.12
0.08
0.04
0.00
0 0 0 0.08 0 0.08
0 0.08 0 0 0 0.08
0 0.08 0 0 0.08 0
0 0 0 0.17 0 0
0 0 0 0.08 0.08 0
0 0.08 0 0 0.08 0

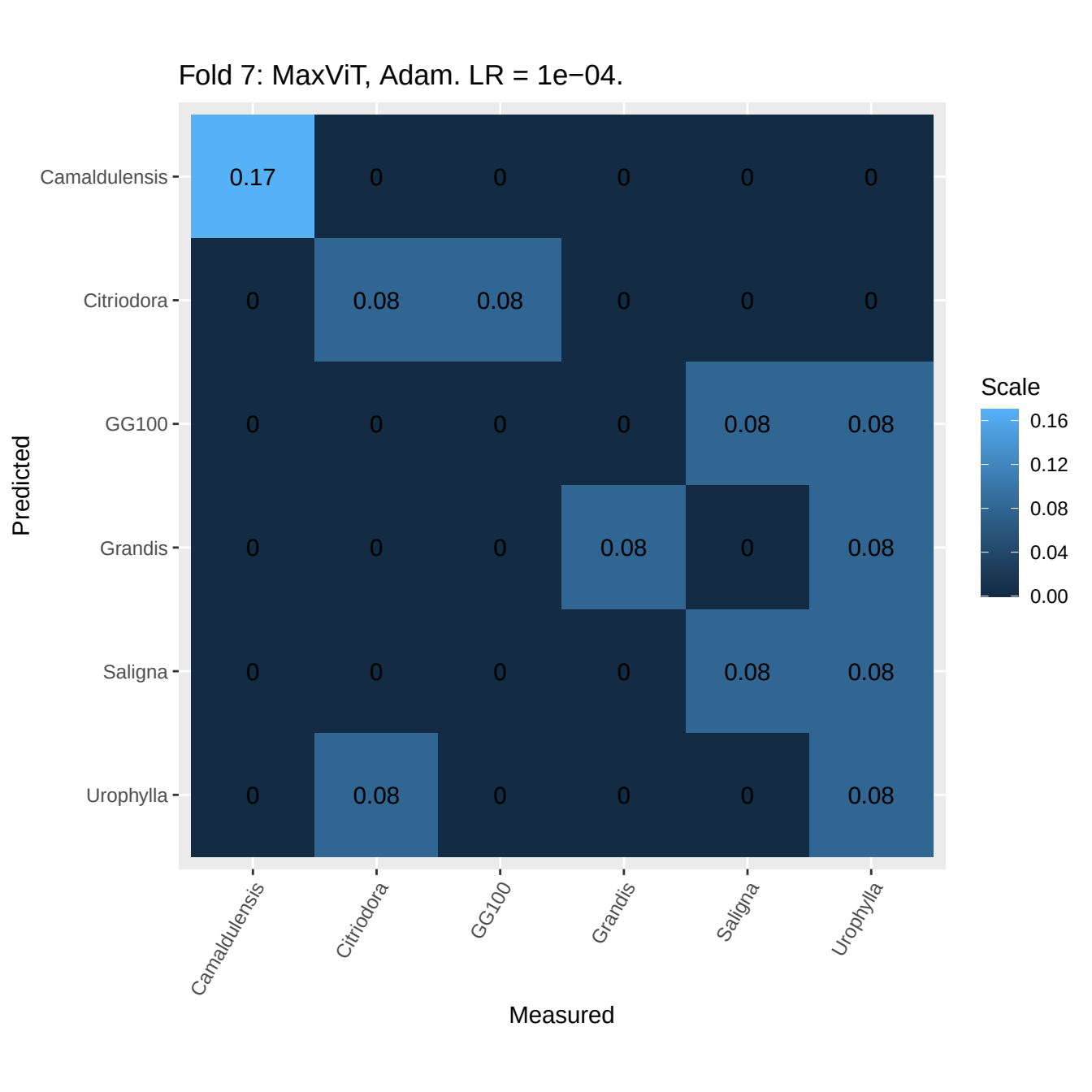

Fold 2: MaxViT, Adam. LR = 1e−04.
Camaldulensis
Citriodora
GG100
Grandis
Saligna
Urophylla
Predicted
Measured
0.08 0.08 0 0 0 0
0 0 0 0.08 0 0.08
0.08 0.08 0 0 0 0
0 0 0 0.08 0 0.08
0 0 0.17 0 0 0
0.08 0 0 0.08 0 0
Scale
0.16
0.12
0.08
0.04
0.00

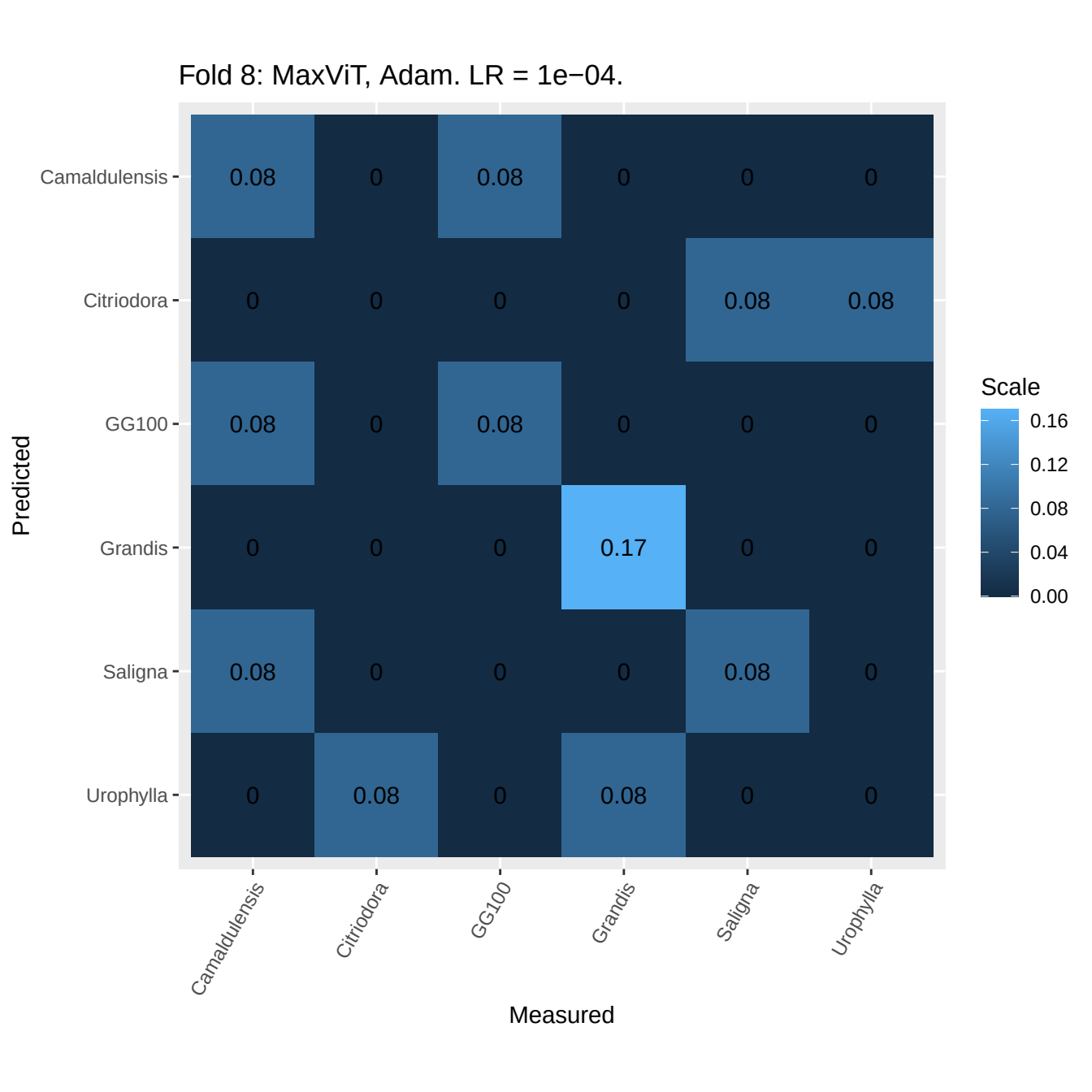

Fold 3: MaxViT, Adam. LR = 1e−04.
Camaldulensis
Citriodora
GG100
Grandis
Saligna
Urophylla
Predicted
Measured
Scale
0.16
0.12
0.08
0.04
0.00
0.08 0.08 0 0 0 0
0.17 0 0 0 0 0
0 0.08 0 0 0.08 0
0 0.08 0 0.08 0 0
0 0.08 0 0 0.08 0
0 0.08 0 0 0 0.08

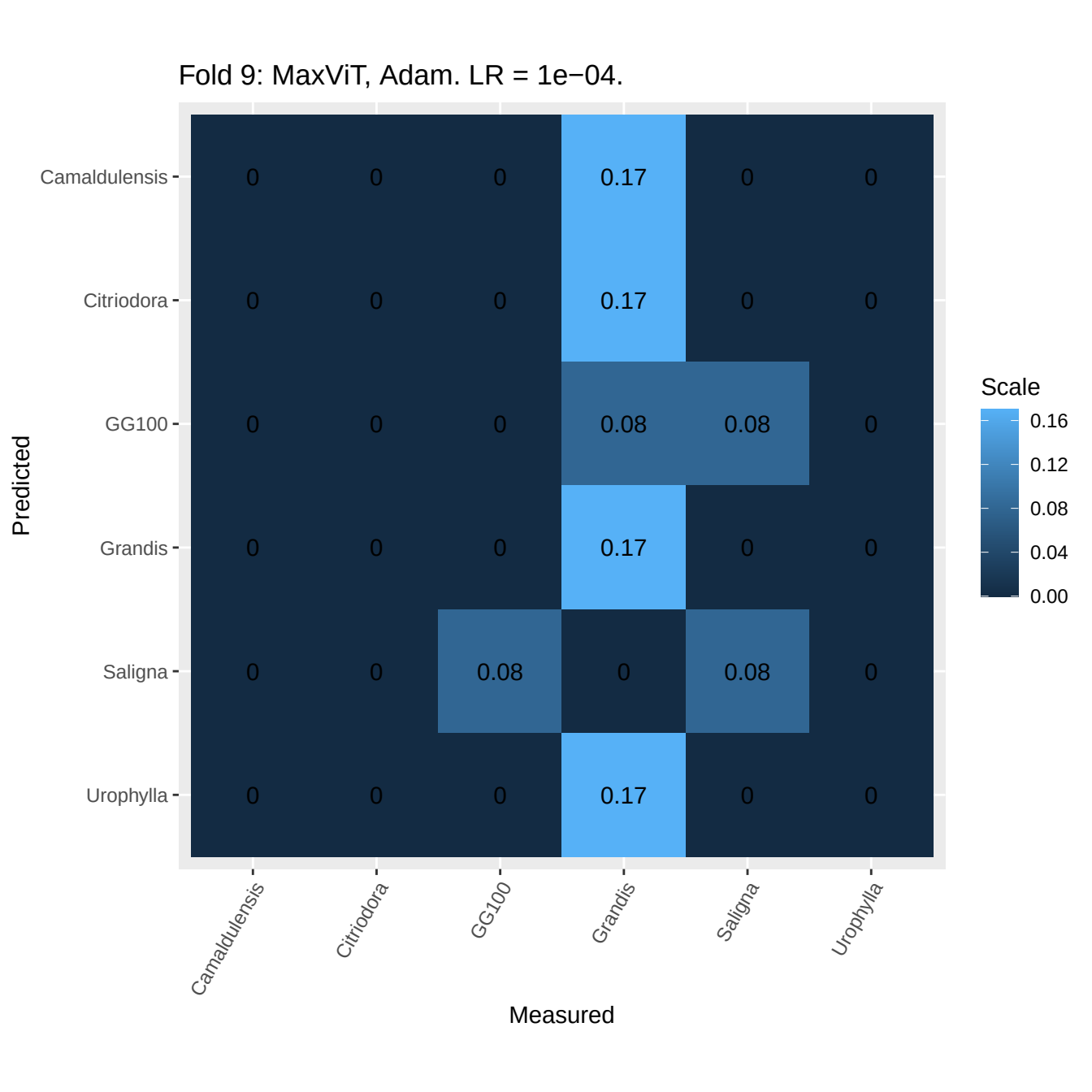

Fold 4: MaxViT, Adam. LR = 1e−04.
Camaldulensis
Citriodora
GG100
Grandis
Saligna
Urophylla
Predicted
0.17 0 0 0 0 0
0.17 0 0 0 0 0
0.08 0 0.08 0 0 0
0.08 0.08 0 0 0 0
0 0 0 0 0.17 0
0.08 0 0 0 0 0.08
Camaldulensis
Citriodora
GG100
Grandis
Saligna
Urophylla
Measured
Scale
0.16
0.12
0.08
0.04
0.00

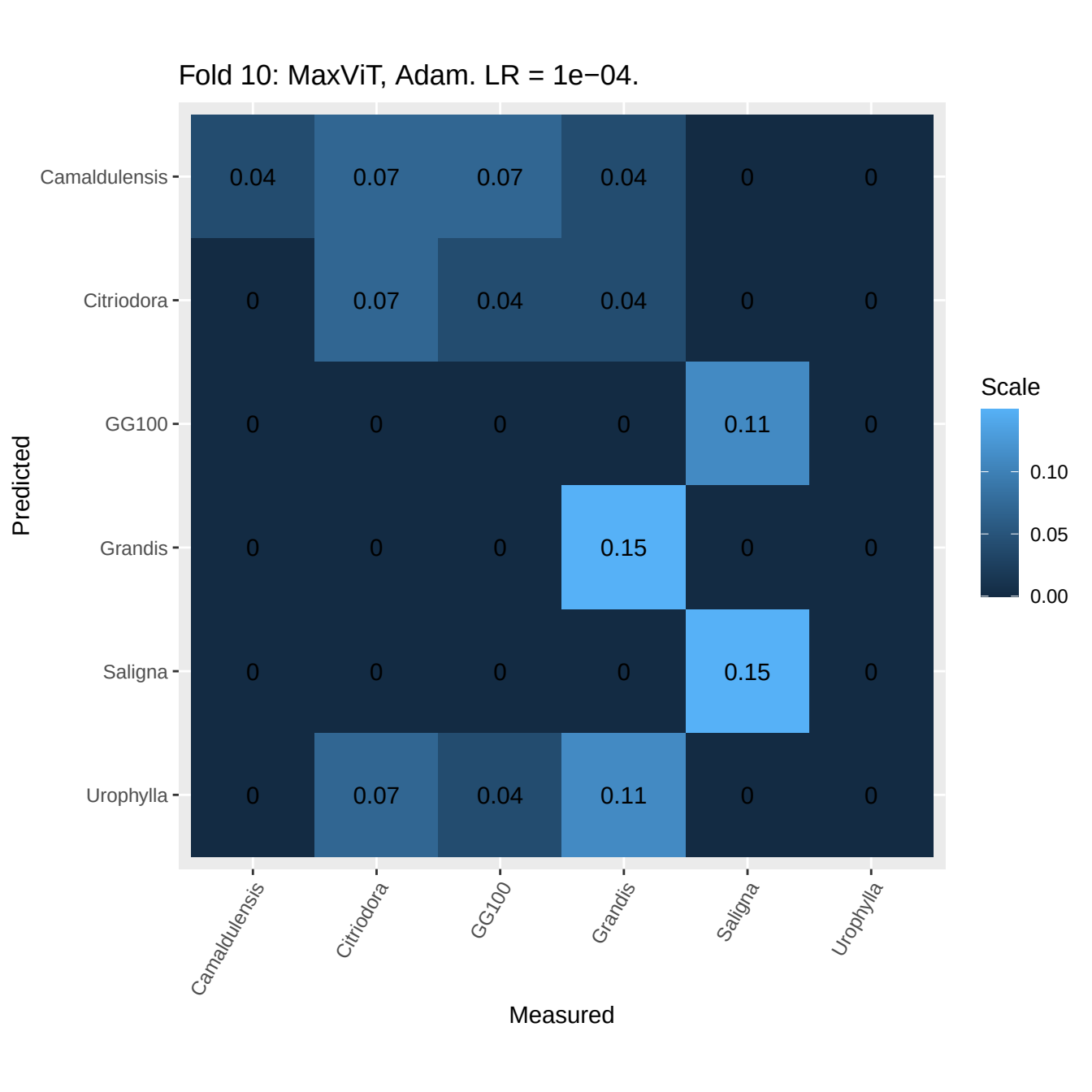

Fold 5: MaxViT, Adam. LR = 1e−04.
Camaldulensis
Citriodora
GG100
Grandis
Saligna
Urophylla
Predicted
Measured
Scale
0.16
0.12
0.08
0.04
0.00
0.17 0 0 0 0 0
0 0.08 0 0.08 0 0
0.08 0.08 0 0 0 0
0 0 0 0.08 0.08 0
0 0 0 0.08 0.08 0
0 0 0 0.17 0 0

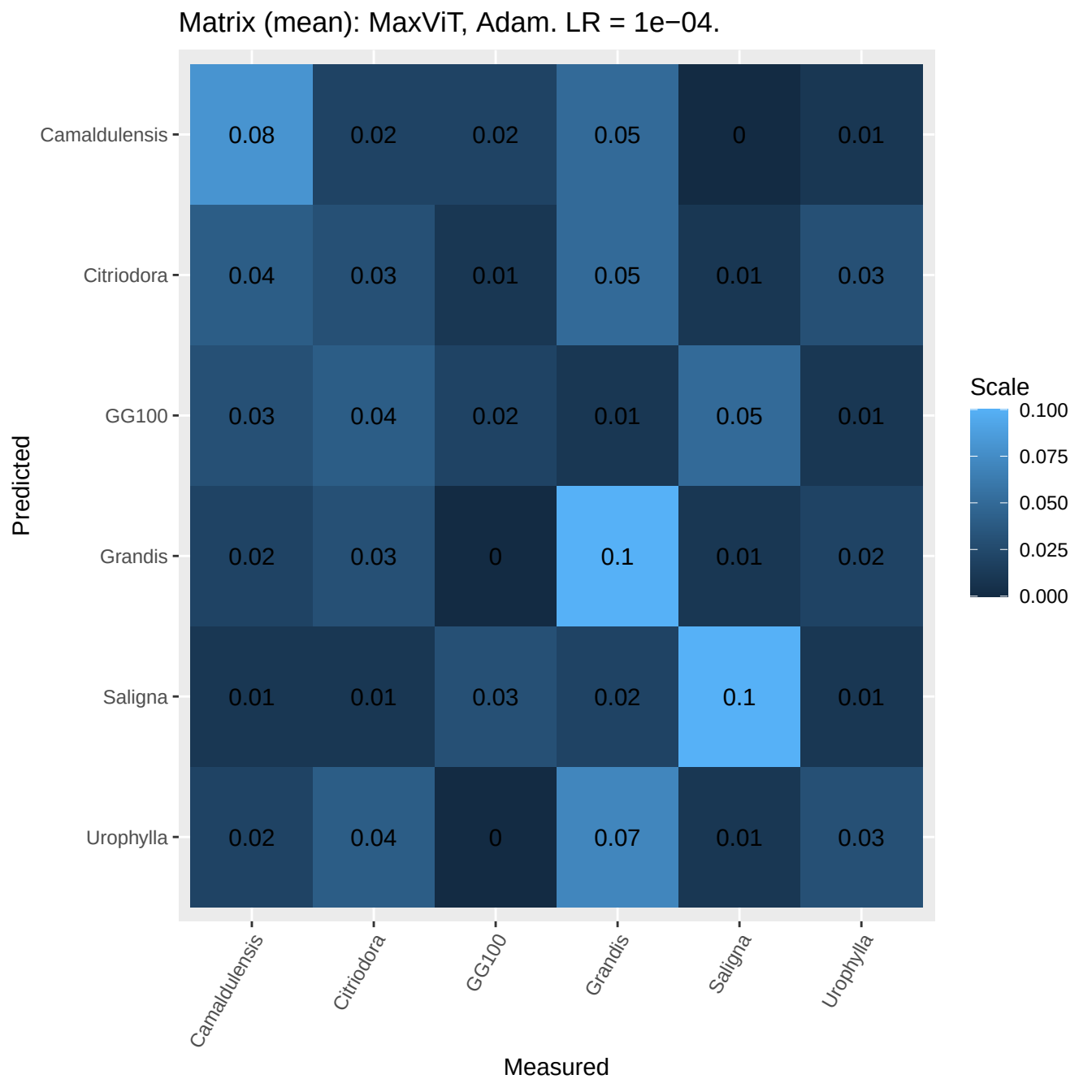

Fold 6: MaxViT, Adam. LR = 1e−04.
Camaldulensis
Citriodora
GG100
Grandis
Saligna
Urophylla
Predicted
0 0 0 0.17 0 0
0.08 0 0 0.08 0 0
0 0.08 0 0 0.08 0
0.08 0.08 0 0 0 0
0 0 0 0 0.17 0
0 0 0 0.08 0 0.08
Camaldulensis
Citriodora
GG100
Grandis
Saligna
Urophylla
Measured
Scale
0.16
0.12
0.08
0.04
0.00


Fold 7: MaxViT, Adam. LR = 1e−04.
Camaldulensis
Citriodora
GG100
Grandis
Saligna
Urophylla
Predicted
Measured
Scale
0.16
0.12
0.08
0.04
0.00
0.17
0.08
0.08
0.08
0.08
0.08
0.08
0.08
0.08
0.08
0.08
0.08
0.08
0.08


Fold 8: MaxViT, Adam. LR = 1e−04.
Camaldulensis
Citriodora
GG100
Grandis
Saligna
Urophylla
Predicted
Measured
0.08 0 0.08 0 0 0
0 0 0 0 0.08 0.08
0.08 0 0.08 0 0 0
0 0 0 0.17 0 0
0.08 0 0 0 0.08 0
0 0.08 0 0.08 0 0
Scale
0.16
0.12
0.08
0.04
0.00


Fold 9: MaxViT, Adam. LR = 1e−04.
Camaldulensis
Citriodora
GG100
Grandis
Saligna
Urophylla
Predicted
Measured
Scale
0.16
0.12
0.08
0.04
0.00
0 0 0 0.17 0 0
0 0 0 0.17 0 0
0 0 0 0.08 0.08 0
0 0 0 0.17 0 0
0 0 0.08 0 0.08 0
0 0 0 0.17 0 0


Fold 10: MaxViT, Adam. LR = 1e−04.
Camaldulensis
Citriodora
GG100
Grandis
Saligna
Urophylla
Predicted
0.04 0.07 0.07 0.04 0 0
0 0.07 0.04 0.04 0 0
0 0 0 0 0.11 0
0 0 0 0.15 0 0
0 0 0 0 0.15 0
0 0.07 0.04 0.11 0 0
Camaldulensis
Citriodora
GG100
Grandis
Saligna
Urophylla
Measured
Scale
0.10
0.05
0.00


Matrix (mean): MaxViT, Adam. LR = 1e−04.
Predicted
Camaldulensis
Citriodora
GG100
Grandis
Saligna
Urophylla
0.08 0.02 0.02 0.05 0 0.01
0.04 0.03 0.01 0.05 0.01 0.03
0.03 0.04 0.02 0.01 0.05 0.01
0.02 0.03 0 0.1 0.01 0.02
0.01 0.01 0.03 0.02 0.1 0.01
0.02 0.04 0 0.07 0.01 0.03
Camaldulensis
Citriodora
GG100
Grandis
Saligna
Urophylla
Measured
Scale
0.100
0.075
0.050
0.025
0.000