83 dca-miR156a ath-miR156c-5p -61.9086.80 89.90

PL

66

121

106

66

125

97

70

118

127

126

94

78

81

87

78

168

198

104

61

81

165

78

77

89

87

MFE

-83.00

-74.70

-57.70

-60.90

-46.20

-86.80

-56.50

-70.30

-86.50

-83.30

-75.60

-52.50

-72.20

-67.00

-66.20

-87.40

3.2

-81.90

-67.30

-69.29

-78.10

-77.70

-61.90

-78.60

-69.60

Name of the newly identified miRNA, closest miRNA found in miRBase, PL = Precursor miRNA Length, MFE = Minimum Free Energy given by RNAfold, NM = Number of mismatches relative to sequence of reference of column 2 (lower case is base found in Daucus carota and not in reference), ML = Mature

Table 1: Discovered miRNA

Mature Sequence

UGACAGAAGAGAGUGAGCAC

UUGACAGAAGAUAGAGAGCAC

UUUGGAUUGAAGGGAGCUCUg

UGCCUGGCUCCCUGUAUGCCA

UGGAGAAGCAGGGCACGUGCA

UCGGACCAGGCUUCAUUCCCC

UCGGACCAGGCUUCAUUCCuC

UGAAGCUGCCAGCAUGAUCUu

UGAAGCUGCCAGCAUGAUCUA

UCGCUUGGUGCAGGUCGGGAc

CAGCCAAGGAUGACUUGCCGG

UAGCCAAGGAUGACUUGCCU

UAGCCAAGGAUGACUUGCCUG

UAGCCAAGGAUGAuUUGCC

UAGCCAAGGAUGACUUGCC

UGAUUGAGCCGUGcCAAUAUC

UGAUUGAGCCGCCCAAUAUC

UUGAGCCGcGCCAAUAUCACu

AGAAUCUUGAUGAUGCUGCAU

UUGGACUGAAGGGAGCUCCC

UUGGACUGAAGGGAGCUCC

AAGCUCAGGAGGGAUAGCGCC

CUGAAGUGUUUGGGGGAACUC

UUCCACgGCUUUCUUGAACUG

UUCCACAGCUUUCUUGAACUU

UGUGUUCUCAGGUCACCCCUU

UGUGUUCUCAGGUCgCCCCUG

UGCCAAAGGAGAGUUGCCCUc

UUAGAUUCgCGCACAAACUC

NM

0

0

1

0

0

0

1

1

0

1

0

0

0

1

0

1

0

2

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ML

20

21

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MSA

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aca minitaroa	acm miletocc op		01.00
dca- $miR157a$	ath-miR157c-5p	85	-86.80
dca- $miR159a$	ath-miR159a	165	-89.90
dca- $miR160a$	ath-miR160a-5p	81	-55.80

Source miRNAs

ath-miR164b-5p

ath-miR166b-3p

ath-miR166g

ath-miR167a-5p

ath-miR167b

ath-miR168a-5p

ath-miR169c

ath-miR169i

ath-miR169k

ath-miR169l

ath-miR169n

ath-miR170-3p

ath-miR171a-3p

ath-miR171c-3p

ath-miR172b-3p

ath-miR319a

ath-miR319b

ath-miR390a-5p

ath-miR395d

ath-miR396a-5p

ath-miR396b-5p

ath-miR398a-3p

ath-miR398b-3p

ath-miR399c-3p

ath-miR403-3p

sequence Length, MSA Mature Sequence Arm.

miRNAs

dca-miR164a

dca-miR166a

dca-miR166b

dca-miR167a

dca-miR167b

dca-miR168a

dca-miR169a

dca-miR169b

dca-miR169c

dca-miR169d

dca-miR169e

dca-miR170a

dca-miR171a

dca-miR171b

dca-miR172a

dca-miR319a

dca-miR319b

dca-miR390a

dca-miR395a

dca-miR396a

dca-miR396b

dca-miR398a

dca-miR398b

dca-miR399a

dca-miR403a