

APPENDIX B

Identification and characterization of a soybean protein with adenylyl cyclase activity

Enetia Desberia Bobo, Katlego Selaelo Sehlabane, Tshegofatso Bridget Dikobe, Mutsa Monica Takundwa, David Tonderai Kawadza and Oziniel Ruzvidzo*

North-West University, Mmabatho, North West, South Africa.
Correspondence to: Oziniel.Ruzvidzo@nwu.ac.za

Description of microarray experiments

Experiment 1

Trifoliolate leaf samples of untreated plants.
Genotype: PS46R
(n = 7)

Experiment 2

Trifoliolate leaf samples of untreated plants.
Genotype: S03W4
(n = 9)

Experiment 3

Trifoliolate leaf samples of untreated plants collected after 50 days of their bud growth and after another 30 days of bud growth.
Genotype: S03W4
(n = 2)

Experiment 4

Root hair samples of plants mock inoculated with *Botrytis japonicum* and collected 12 hours after inoculation.
Genotype: Williams.
(n = 2)

Experiment 5

Root hair samples of plants mock inoculated with *B. japonicum* and collected 48 hours after inoculation.
Genotype: Williams.
(n = 5)

Experiment 6

Leaf samples of plants mock inoculated with *Phakopsora pachyrhizi* and collected 6 hours after inoculation.
Genotype: TW72-1
(n = 5)

Experiment 7

Leaf samples of plants mock inoculated with *P. pachyrhizi* and collected 12 hours after inoculation.
Genotype: HW94-1
(n = 2)

Experiment 8

Leaf samples of plants mock inoculated with *P. pachyrhizi* and collected 24 hours after inoculation.
Genotype: HW94-1
(n = 3)

Experiment 9

Leaf samples of plants mock inoculated with *P. pachyrhizi* and collected 48 hours after inoculation.

Genotype: HW94-1

(n = 4)

Experiment 10

Leaf samples of plants mock inoculated with *P. pachyrhizi* and collected 144 hours after inoculation.

Genotype: PI 459025B

(n = 4)

Experiment 11

Leaf samples of plants mock inoculated with *P. pachyrhizi* and collected 216 hours after inoculation.

Genotype: Williams

(n = 11)

Experiment 12

Leaf samples of plants mock inoculated with *P. pachyrhizi* and collected 288 hours after inoculation.

Genotype: Williams

(n = 12)

Experiment 13

Primary root samples of plants mock inoculated with *Phytophthora sojae* and collected 24 hours after inoculation.

Genotype: Conrad

(n = 2)

Experiment 14

Root/hypocotyl samples of plants mock inoculated with *P. sojae* and collected 72 hours after inoculation.

Genotype: PI 291327

(n = 9)

Experiment 15

Root/hypocotyl samples of plants mock inoculated with *P. sojae* and collected 120 hours after inoculation.

Genotype: SLO-1

(n = 16)

Experiment 16

Trifoliolate leaf samples of plants collected 15 days after bud removal and 30 days after bud growth.

Genotype: S03W4

(n = 4)

Experiment 17

Trifoliolate leaf samples of plants collected 15 days after bud removal and 50 days after bud growth.

Genotype: S03W4

(n = 7)

Experiment 18

Root tip samples of plants mock treated with 600 mM NaCl and collected 48 hours after treatment.

Genotype: PI 416937

(n = 3)

Experiment 19

Root tip samples of plants mock exposed to pH 8.0 and collected 12 hours after exposure.

Genotype: S03W4

(n = 2)

Experiment 20

Root tip samples of plants mock exposed to low Fe content and collected 24 hours after exposure.

Genotype: PI 416937

(n = 3)