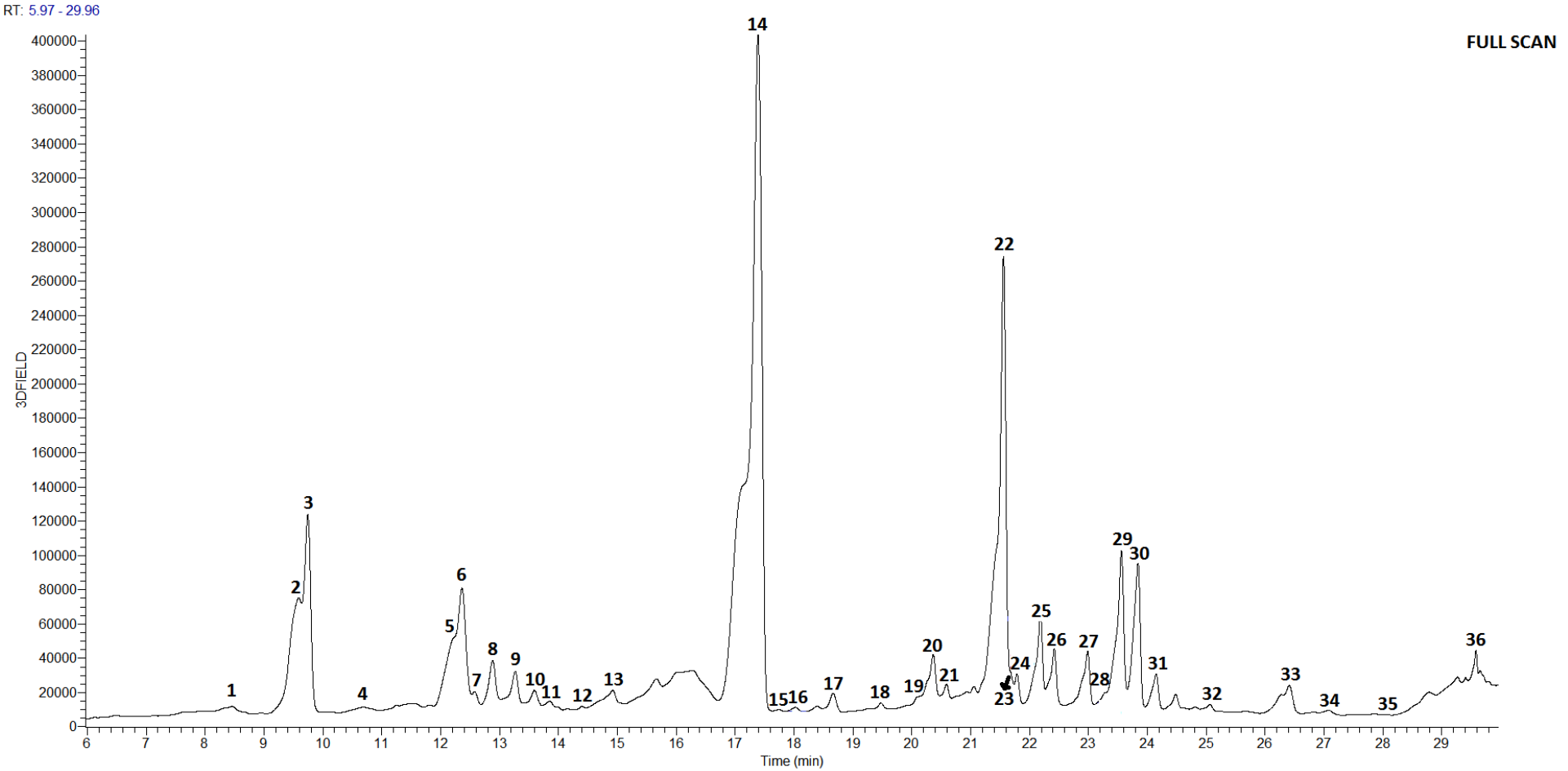
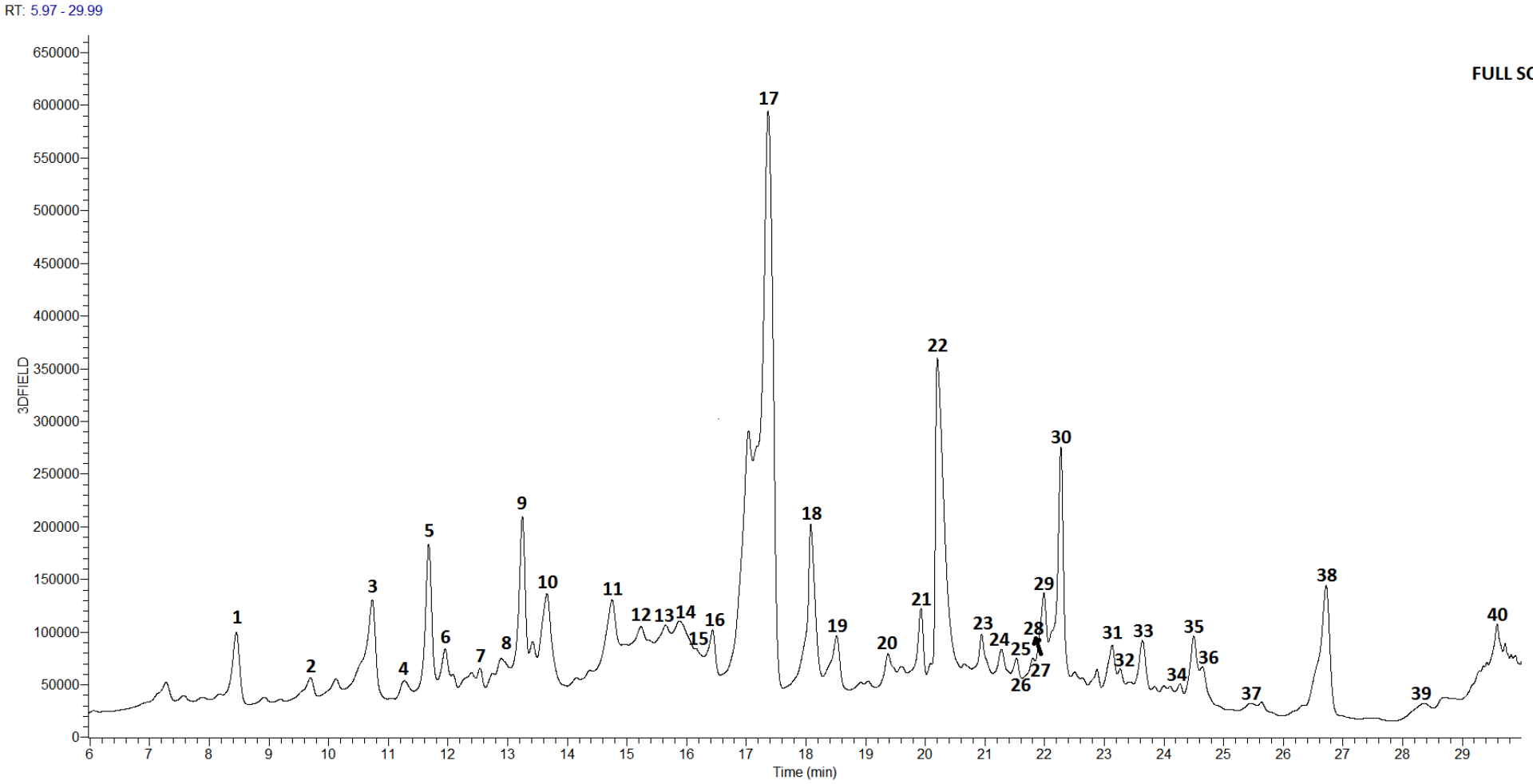
Figure S1. Full scan on a HPLC-MS, and the phenolic compounds identified for *J. regia* leaves.



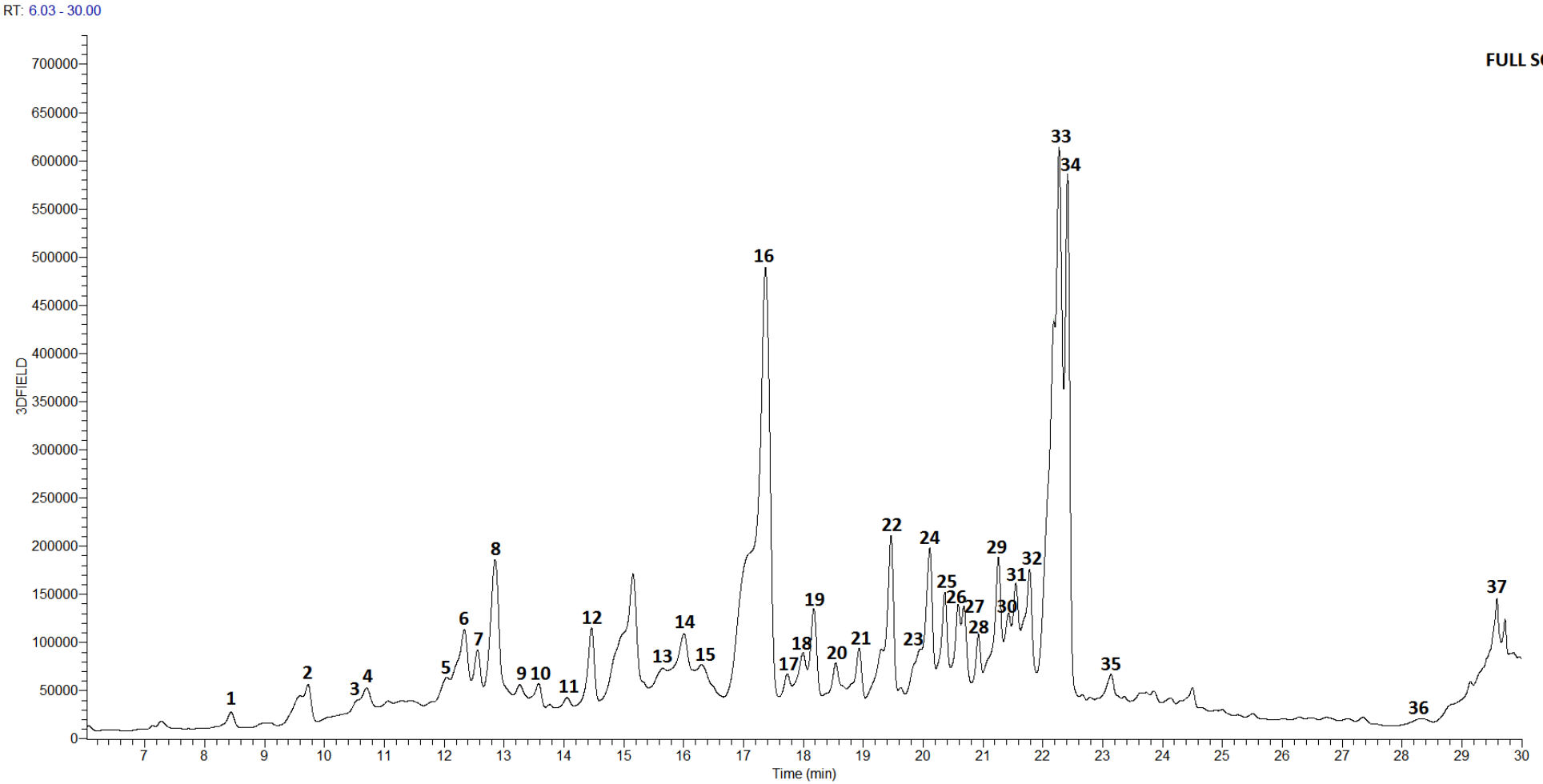
1= Epigallocatechin; **2**= Procyanidin dimer 1; **3**= Neochlorogenic acid (3-caffeoylquinic acid); **4**= Procyanidin dimer 2; **5**= Procyanidin dimer 3; **6**=3-*p*-Coumaroylquinic acid; **7**= Cryptochlorogenic acid (4-caffeoylquinic acid); **8**=(+)Catechin; **9**= Dihydroxytetralone hexoside; **10**= Hydrojuglone derivative 1; **11**= Chlorogenic acid (5-caffeoylquinic acid); **12**= Hydrojuglone hexoside derivative 1; **13**=5-Hydroxy-2,3-dihydro-1,4-napthalenedione; **14**= Hydrojuglone-β-D-glucopyranoside; **15**= Myricetin-3-galactoside; **16**= Hydrojuglone derivative 2; **17**= Hydrojuglone derivative pentoside 1; **18**= Tetralone hexoside; **19**= Myricetin-3-rhamnoside; **20**= Quercetin-3-galactoside; **21**= Quercetin-3-glucoside; **22**= Hydrojuglone derivative pentoside 2; **23**= Kaempferol-3-glucoside; **24**= Quercetin-3-arabinopyranoside; **25**= Quercetin-3-arabinofuranoside; **26**= Quercetin-3-rhamnoside; **27**= Kaempferol-3-pentoside 1; **28**= Dihydrokaempferol pentoside 1; **29**= Dihydrokaempferol pentoside 2; **30**= Kaempferol-3-pentoside 2; **31**= Kaempferol-3-rhamnoside; **32**= Caffeic acid hexoside derivative; **33**= *p*-Coumaric acid hexoside derivative 2; **34**= Hydrojuglone dihexoside derivative; **35**=1,4-napthoquinone and hydrojuglone; **36**= Juglone (5-hydroxy-1,4-napthoquinone)

Figure S2. Full scan on a HPLC-MS, and the phenolic compounds identified for *J. regia* side roots.



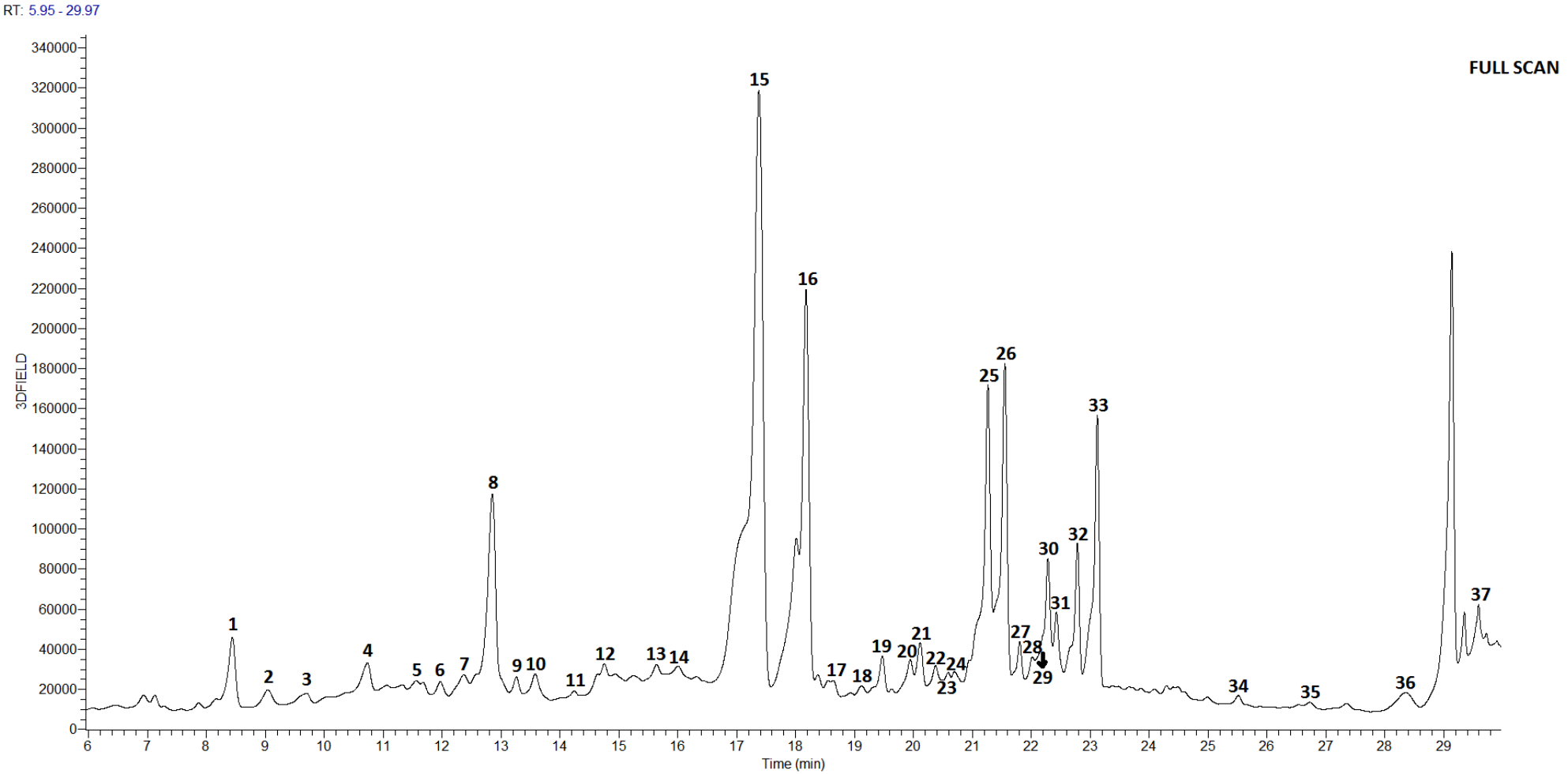
1= bis-HHDP-glucose 1 ; **2**=1-*O*-(4-Hydroxy-3,5-dimetoxybenzoyl) -D-glucopyranoside; **3**= bis-HHDP-glucose 2; **4**= Gallic acid derivative 1; **5**= Gallic acid derivative 2; **6**= Ellagic acid derivative 1; **7**= Tellimagrandin isomer (digalloyl-HHDP-glucose) 1; **8**= Strictin/isostrictin isomer (galloyl-HHDP-glucose); **9**=(+)Catechin; **10**= Ellagic acid derivative 2; **11**= Hydrojuglone derivative 1; **12**= Ellagic acid derivative 3; **13**= Ellagic acid derivative 4; **14**= Ellagic acid derivative 5; **15**= Tellimagrandin isomer (digalloyl-HHDP-glucose) 2; **16**= Trigalloyl-glucose isomer; **17**= Hydrojuglone-β-D-glucopyranoside; **18**= Ellagic acid pentoside; **19**= Gallic acid derivative 6; **20**= Tetralone hexoside; **21**= Gallic acid derivative 7; **22**= Ellagic acid; **23**= Gallic acid derivative 8; **24**= Digalloylgallate; **25**= Gallic acid derivative 9; **26**= Hydrojuglone derivative rhamnoside; **27**= Gallic acid derivative 10; **28**= Hydrojuglone derivative pentoside 2; **29**=3-*O*-Methylellagic acid-4-*O*-β-D-arabinopyranoside; **30**= Gallic acid derivative 11; **31**= *p*-Coumaric acid hexoside derivative1; **32**= Gallic acid derivative 12; **33**=1-β-D-Glucopyranosyloxy-4,8-dihydroxy-2-napthoic acid; **34**=1,4,8-trihydroxynapthalene-1-D-glucopyranoside; **35**= Isofraxidin; **36**= Isofraxidin derivative; **37**= Hydrojuglone derivative 5; **38**= Hydrojuglone derivative 6; **39**=1,4-napthoquinone and hydrojuglone; **40**= Juglone (5-hydroxy-1,4-napthoquinone)

Figure S3. Full scan on a HPLC-MS, and the phenolic compounds identified for *J. regia* buds.



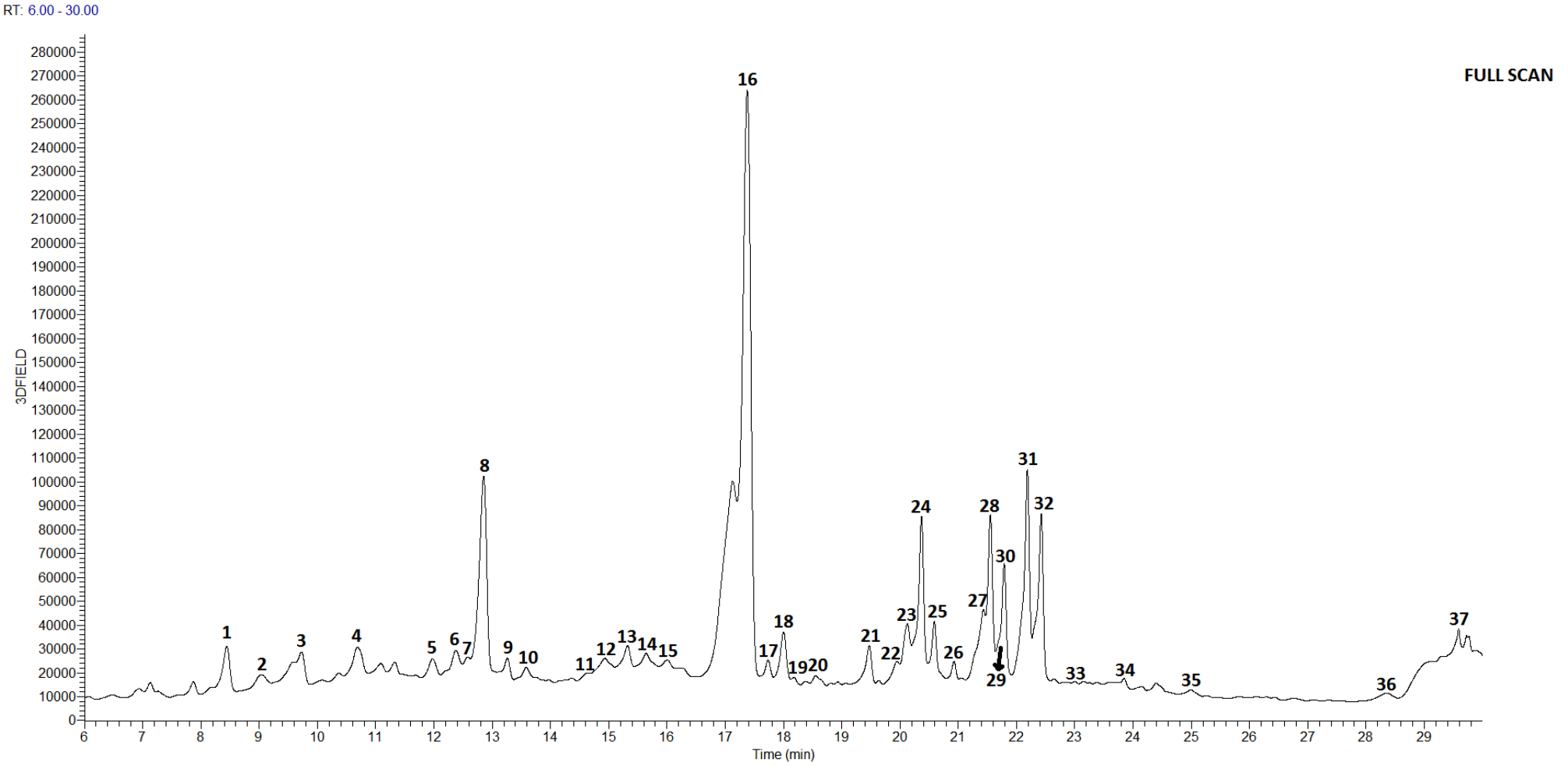
1= Epigallocatechin; **2**= Neochlorogenic acid (3-caffeoylquinic acid); **3**= bis-HHDP-glucose 2; **4**=(epi)Catechin isomer; **5**= Procyanidin dimer 3; **6**=3-*p*-Coumaroylquinic acid; **7**= Cryptochlorogenic acid (4-caffeoylquinic acid); **8**=(+)Catechin; **9**= Dihydroxytetralone hexoside; **10**= Hydrojuglone derivative 1; **11**= Chlorogenic acid (5-caffeoylquinic acid); **12**= Hydrojuglone dihexoside; **13**= Ellagic acid derivative 5; **14**= *p*-Coumaroylquinic acid; **15**= Myricetin galloyl hexoside; **16**= Hydrojuglone-β-D-glucopyranoside; **17**= Myricetin-3-galactoside; **18**= Hydrojuglone derivative 2; **19**= Hydrojuglone derivative 3; **20**= Gallic acid derivative 4; **21**= Quercetin galloyl hexoside; **22**= Tetralone hexoside; **23**= Gallic acid derivative 7; **24**= Myricetin-3-rhamnoside; **25**= Quercetin-3-galactoside; **26**= Quercetin-3-glucoside; **27**=(epi)Catechin galloyl; **28**= Trihydroxytetralone galloyl hexoside; **29**=; Hydrojuglone derivative rhamnoside; **30**= Gallic acid derivative 10; **31**= Hydrojuglone derivative pentoside 2; **32**= Quercetin-3-arabinopyranoside; **33**= Gallic acid derivative 11; **34**= Quercetin-3-rhamnoside; **35**= *p*-Coumaric acid hexoside derivative 1; **36**=1,4-napthoquinone and hydrojuglone; **37**= Juglone (5-hydroxy-1,4-napthoquinone)

Figure S4. Full scan on a HPLC-MS, and the phenolic compounds identified for *J. regia* one-year old bark.



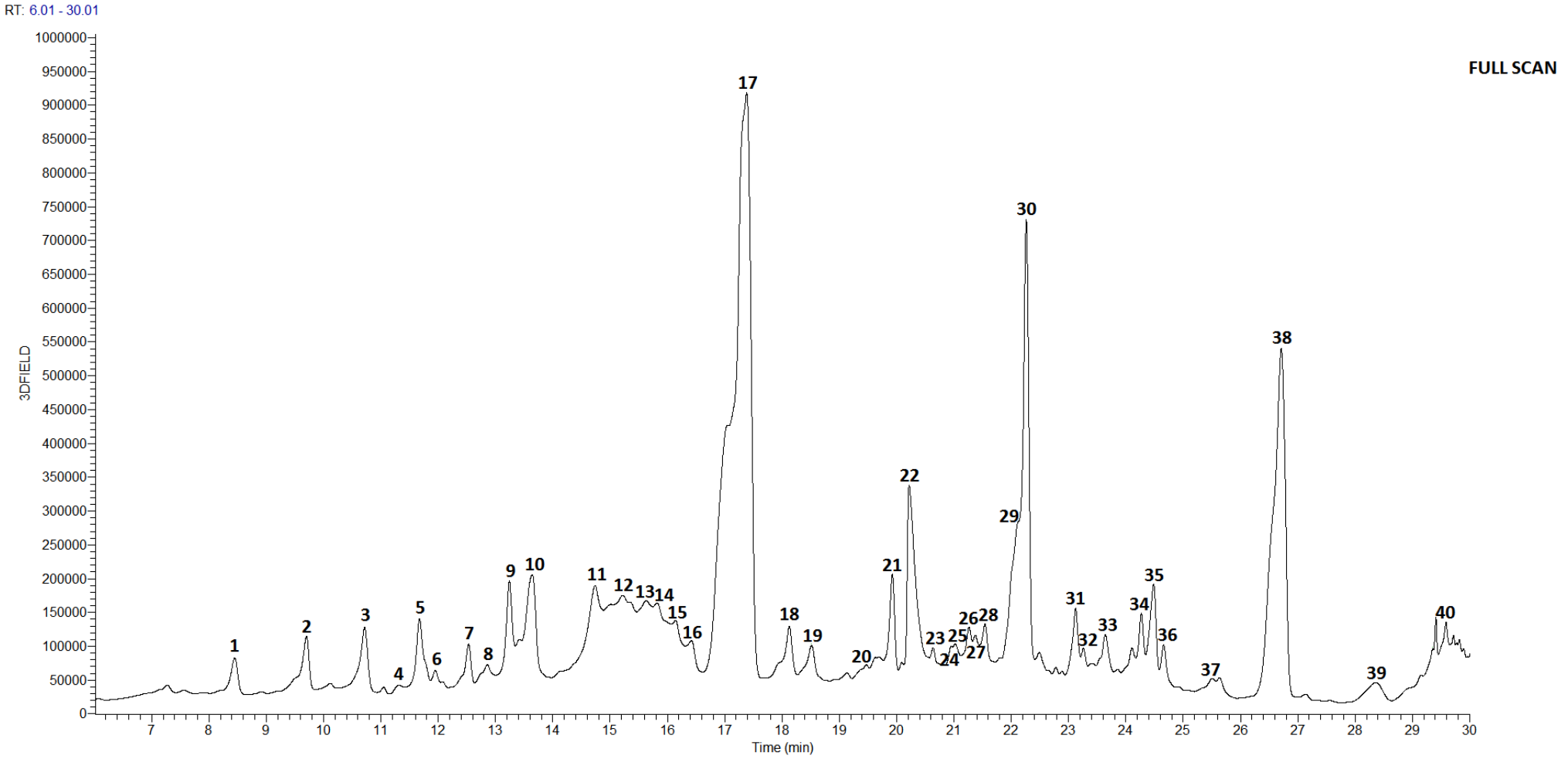
1= Epigallocatechin; **2**=(epi)Catechin derivative 1; **3**=1-*O*-(4-Hydroxy-3,5-dimetoxybenzoyl) -D-glucopyranoside; **4**= bis-HHDP-glucose 2; **5**= Gallic acid derivative 3; **6**= Procyanidin dimer 3; **7**= Strictin/isostrictin isomer (galloyl-HHDP-glucose); **8**=(+)Catechin; **9**= Dihydroxytetralone hexoside; **10**= Hydrojuglone derivative 1; **11**=(epi)Catechin dihexoside; **12**= Ellagic acid derivative 3; **13**= Ellagic acid derivative 5; **14**= *p*-Coumaroylquinic acid; **15**= Hydrojuglone-β-D-glucopyranoside; **16**= Hydrojuglone derivative 3; **17**= Gallic acid derivative 5; **18**= Hydrojuglone derivative 4; **19**= Tetralone hexoside; **20**= Gallic acid derivative 7; **21**= Myricetin-3-rhamnoside; **22**= Quercetin-3-galactoside; **23**= Ellagic acid; **24**=(epi)Catechin galloyl; **25**= Hydrojuglone derivative rhamnoside; **26**= Hydrojuglone derivative pentoside 2; **27**= Quercetin-3-arabinopyranoside; **28**= Gallic acid derivative 10; **29**=3-*O*-Methylellagic acid-4-*O*-β-D-arabinopyranoside; **30**= Gallic acid derivative 11; **31**= Quercetin-3-rhamnoside; **32**= Kaempferol-7-hexoside 1; **33**= Kaempferol-7-hexoside 2; **34**= Hydrojuglone derivative 5; **35**= Hydrojuglone derivative 6; **36**=1,4-napthoquinone and hydrojuglone; **37**= Juglone (5-hydroxy-1,4-napthoquinone)

Figure S5. Full scan on a HPLC-MS, and the phenolic compounds identified for *J. regia* petiole.



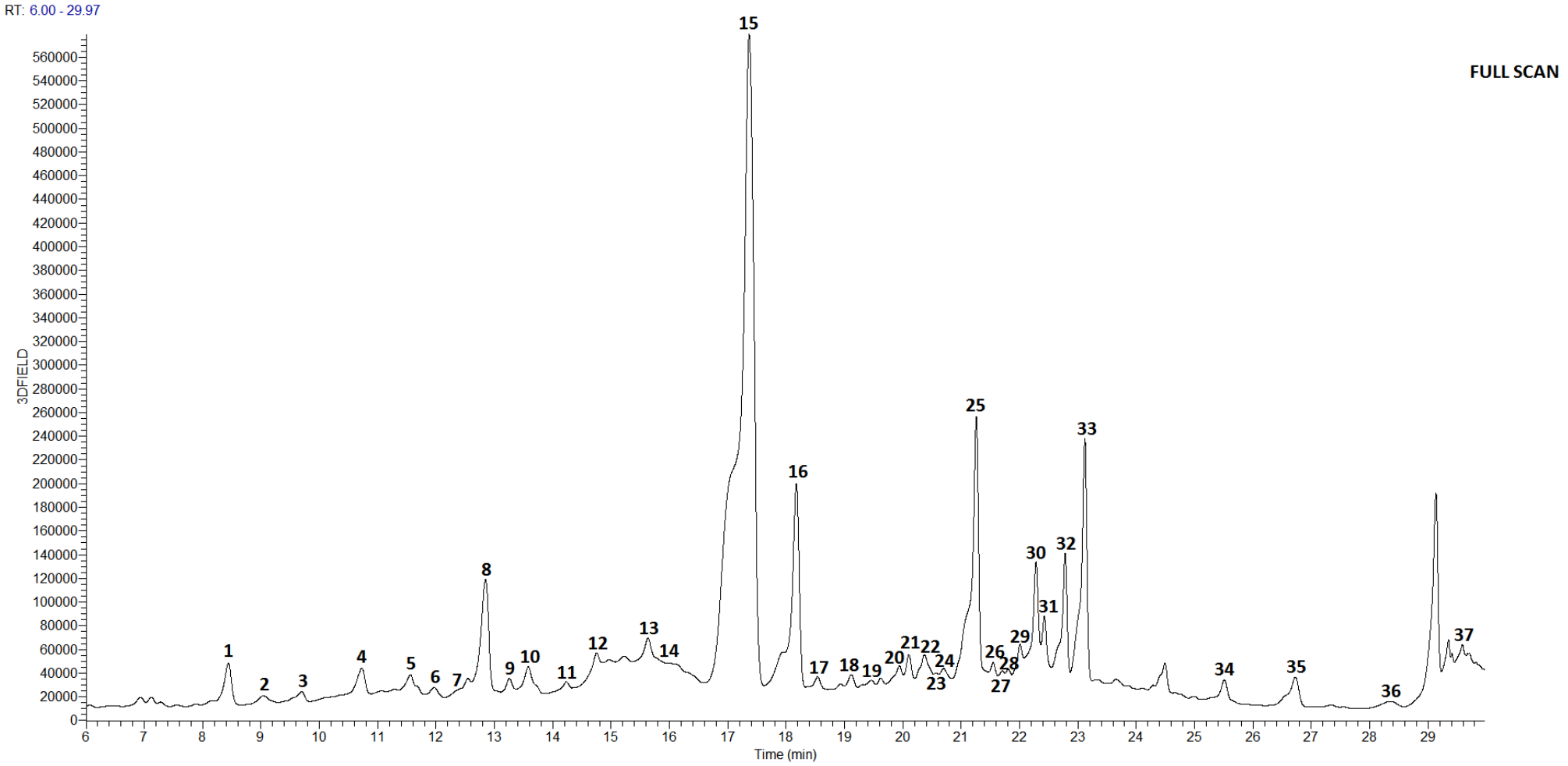
1= Epigallocatechin; **2**= Procyanidin dimer 1; **3**= Neochlorogenic acid (3-caffeoylquinic acid); **4**= Procyanidin dimer 2; **5**= Procyanidin dimer 3; **6**=3-*p*-Coumaroylquinic acid; **7**= Cryptochlorogenic acid (4-caffeoylquinic acid); **8**=(+)Catechin; **9**= Dihydroxytetralone hexoside; **10**= Hydrojuglone derivative 1; **11**= Hydrojuglone hexoside derivative 1; **12**=5-Hydroxy-2,3-dihydro-1,4-napthalenedione; **13**=(-)Epicatechin; **14**= Procyanidin dimer 4; **15**= *p*-Coumaroylquinic acid; **16**= Hydrojuglone-β-D-glucopyranoside; **17**= Myricetin-3-galactoside; **18**= Hydrojuglone derivative 2; **19**= Myricetin-3-glucoside; **20**= Hydrojuglone derivative pentoside 1; **21**= Tetralone hexoside; **22**= Myricetin pentoside; **23**= Myricetin-3-rhamnoside; **24**= Quercetin-3-galactoside; **25**= Quercetin-3-glucoside; **26**= Trihydroxytetralone galloyl hexoside; **27**= Quercetin-3-xyloside; **28**= Hydrojuglone derivative pentoside 2; **29**= Kaempferol-3-glucoside; **30**= Quercetin-3-arabinopyranoside; **31**= Quercetin-3-arabinofuranoside; **32**= Quercetin-3-rhamnoside; **33**= Kaempferol-3-pentoside 1; **34**= Kaempferol-3-pentoside 2; **35**= Caffeic acid hexoside derivative; **36**=1,4-napthoquinone and hydrojuglone; **37**= Juglone (5-hydroxy-1,4-napthoquinone)

Figure S6. Full scan on a HPLC-MS, and the phenolic compounds identified for *J. regia* main root.



1= bis-HHDP-glucose 1 ; **2**=1-*O*-(4-Hydroxy-3,5-dimetoxybenzoyl) -D-glucopyranoside; **3**= bis-HHDP-glucose 2; **4**= Gallic acid derivative 1; **5**= Gallic acid derivative 2; **6**= Ellagic acid derivative 1; **7**= Tellimagrandin isomer (digalloyl-HHDP-glucose) 1; **8**= Strictin/isostrictin isomer (galloyl-HHDP-glucose); **9**=(+)Catechin; **10**= Ellagic acid derivative 2; **11**= Hydrojuglone derivative 1; **12**= Ellagic acid derivative 3; **13**= Ellagic acid derivative 4; **14**= Ellagic acid derivative 5; **15**= Tellimagrandin isomer (digalloyl-HHDP-glucose) 2; **16**= Trigalloyl-glucose isomer; **17**= Hydrojuglone-β-D-glucopyranoside; **18**= Ellagic acid pentoside; **19**= Gallic acid derivative 6; **20**= Tetralone hexoside; **21**= Gallic acid derivative 7; **22**= Ellagic acid; **23**= Gallic acid derivative 8; **24**= Digalloylgallate; **25**= Gallic acid derivative 9; **26**= Hydrojuglone derivative rhamnoside; **27**= Gallic acid derivative 10; **28**= Hydrojuglone derivative pentoside 2; **29**=3-*O*-Methylellagic acid-4-*O*-β-D-arabinopyranoside; **30**= Gallic acid derivative 11; **31**= *p*-Coumaric acid hexoside derivative1; **32**= Gallic acid derivative 12; **33**=1-β-D-Glucopyranosyloxy-4,8-dihydroxy-2-napthoic acid; **34**=1,4,8-trihydroxynapthalene-1-D-glucopyranoside; **35**= Isofraxidin; **36**= Isofraxidin derivative; **37**= Hydrojuglone derivative 5; **38**= Hydrojuglone derivative 6; **39**=1,4-napthoquinone and hydrojuglone; **40**= Juglone (5-hydroxy-1,4-napthoquinone)

Figure S7. Full scan on a HPLC-MS, and the phenolic compounds identified for *J. regia* two-year old bark.



1= Epigallocatechin; **2**=(epi)Catechin derivative 1; **3**=1-*O*-(4-Hydroxy-3,5-dimetoxybenzoyl) -D-glucopyranoside; **4**= bis-HHDP-glucose 2; **5**= Gallic acid derivative 3; **6**= Procyanidin dimer 3; **7**= Strictin/isostrictin isomer (galloyl-HHDP-glucose); **8**=(+)Catechin; **9**= Dihydroxytetralone hexoside; **10**= Hydrojuglone derivative 1; **11**=(epi)Catechin dihexoside; **12**= Ellagic acid derivative 3; **13**= Ellagic acid derivative 5; **14**= *p*-Coumaroylquinic acid; **15**= Hydrojuglone-β-D-glucopyranoside; **16**= Hydrojuglone derivative 3; **17**= Gallic acid derivative 5; **18**= Hydrojuglone derivative 4; **19**= Tetralone hexoside; **20**= Gallic acid derivative 7; **21**= Myricetin-3-rhamnoside; **22**= Quercetin-3-galactoside; **23**= Ellagic acid; **24**=(epi)Catechin galloyl; **25**= Hydrojuglone derivative rhamnoside; **26**= Hydrojuglone derivative pentoside 2; **27**= Quercetin-3-arabinopyranoside; **28**= Gallic acid derivative 10; **29**=3-*O*-Methylellagic acid-4-*O*-β-D-arabinopyranoside; **30**= Gallic acid derivative 11; **31**= Quercetin-3-rhamnoside; **32**= Kaempferol-7-hexoside 1; **33**= Kaempferol-7-hexoside 2; **34**= Hydrojuglone derivative 5; **35**= Hydrojuglone derivative 6; **36**=1,4-napthoquinone and hydrojuglone; **37**= Juglone (5-hydroxy-1,4-napthoquinone)