

Supplementary data for article:

Fotirić Akšić, M. M.; Dabić, D. Č.; Gašić, U. M.; Zec, G. N.; Vulić, T. B.; Tešić, Ž. Lj.; Natić, M. M. Polyphenolic Profile of Pear Leaves with Different Resistance to Pear Psylla (*Cacopsylla Pyri*). *Journal of Agricultural and Food Chemistry* **2015**, *63* (34), 7476–7486.  
<https://doi.org/10.1021/acs.jafc.5b03394>

**Polyphenolic Profile of Pear Leaves with Different Resistance to Pear Psylla (*Cacopsylla pyri*)**

Milica M. Fotirić Akšić<sup>†,\*</sup>, Dragana Č. Dabić<sup>‡</sup>, Uroš M. Gašić<sup>§</sup>, Gordan N. Zec<sup>†</sup>, Todor B. Vulić<sup>†</sup>, Živoslav Lj. Tešić<sup>§</sup>, Maja M. Natić<sup>§</sup>

<sup>†</sup>*University of Belgrade, Faculty of Agriculture, Nemanjina 6, 11080 Zemun, Serbia*

<sup>‡</sup>*Innovation Center, Faculty of Chemistry Ltd, University of Belgrade, Studentski trg 12-16, 11000 Belgrade, Serbia*

<sup>§</sup>*Faculty of Chemistry, University of Belgrade, Studentski trg 12-16, 11000 Belgrade, Serbia*

\*Corresponding author:

Tel: +381112615315/ ext. 457

Fax: +381112199805

E-mail: fotiric@agrif.bg.ac.rs

**Table S1.** Intensities Obtained from the Full Scan Spectra for Identified Polyphenols in Pear Leaf Samples.

|                                  | 1     | 2      | 3      | 4      | 5        | 6      | 7       | 8      | 9      | 10       | 11     | 12     |
|----------------------------------|-------|--------|--------|--------|----------|--------|---------|--------|--------|----------|--------|--------|
| <b>Bella di Giungo</b>           | 80499 | 53639  | 57172  | 77068  | 2279858  | 155789 | 855715  | 144105 | 25859  | 12762288 | 84283  | 42404  |
| <b>Turandot</b>                  | 43353 | 70152  | 142619 | 40662  | 1135790  | 450909 | 616270  | 333796 | 9093   | 19707225 | 73771  | 43976  |
| <b>Moldova's early</b>           | 29797 | 50466  | 817977 | 53562  | 10968329 | 256919 | 1483463 | 125871 | 5229   | 19013979 | 62882  | 69543  |
| <b>Coscia</b>                    | 29476 | 106568 | 26425  | 36108  | 3607804  | 134732 | 622425  | 109098 | 21490  | 23039406 | 53351  | 46306  |
| <b>Ilinjača</b>                  | 70571 | 83935  | 458409 | 72252  | 10712751 | 229397 | 636303  | 202431 | 8133   | 14992925 | 50828  | 44340  |
| <b>Carmen</b>                    | 54280 | 43980  | 260576 | 59361  | 1740822  | 276308 | 1428801 | 57132  | 6649   | 25989590 | 57310  | 76618  |
| <b>Butirra precoce Morettini</b> | 40740 | 67257  | 257737 | 54382  | 3489795  | 162136 | 376933  | 130858 | 6646   | 16933728 | 47640  | 23362  |
| <b>Precoce de Trevoux</b>        | 40310 | 47539  | 190024 | 55758  | 6886719  | 180626 | 437421  | 168827 | 11333  | 20829701 | 59134  | 48182  |
| <b>Santa Maria</b>               | 32845 | 111845 | 0      | 58421  | 5316984  | 94914  | 573734  | 66864  | 274385 | 9951756  | 41674  | 34146  |
| <b>Williams'</b>                 | 65094 | 43370  | 184172 | 39348  | 1060911  | 262309 | 559573  | 304109 | 7543   | 17459688 | 41037  | 83376  |
| <b>Jeribasma</b>                 | 670   | 106817 | 219152 | 32282  | 3769651  | 141141 | 4780365 | 3040   | 6195   | 17875924 | 358    | 30086  |
| <b>Abbé Fétel</b>                | 63344 | 35212  | 132492 | 39020  | 2533481  | 98331  | 479164  | 58740  | 6653   | 21483537 | 40870  | 64028  |
| <b>Packham's Triumphy</b>        | 51608 | 31623  | 273952 | 51341  | 4198020  | 176293 | 789897  | 160540 | 6803   | 20527229 | 80825  | 39191  |
| <b>Beurre Bosc</b>               | 46997 | 149307 | 843369 | 52103  | 8978036  | 259397 | 449137  | 32880  | 7086   | 23654061 | 76811  | 49530  |
| <b>Alexander Lucas</b>           | 67088 | 102719 | 580589 | 37058  | 6728255  | 482721 | 796308  | 128424 | 4518   | 17558436 | 27613  | 52093  |
| <b>Piore de Cure</b>             | 88811 | 99774  | 280015 | 28597  | 2955754  | 176498 | 1374251 | 382542 | 8706   | 22481768 | 56834  | 74288  |
| <b>Niitaka</b>                   | 49634 | 273817 | 130477 | 86078  | 3019722  | 297106 | 337669  | 60552  | 0      | 18922092 | 93727  | 24559  |
| <b>Kumoi</b>                     | 43667 | 200404 | 17132  | 22669  | 10479875 | 271702 | 180138  | 144442 | 3904   | 13391934 | 47641  | 14890  |
| <b>Chojuro</b>                   | 33676 | 196108 | 32503  | 61322  | 6358091  | 0      | 135376  | 72043  | 5384   | 15364265 | 82376  | 22284  |
| <b>Shinsui</b>                   | 0     | 187925 | 117534 | 49030  | 16964306 | 351782 | 446358  | 33178  | 11175  | 22943537 | 106246 | 22549  |
| <b>Nijisseiki</b>                | 26990 | 388878 | 284559 | 106496 | 10267637 | 344907 | 125399  | 114626 | 6745   | 26299484 | 105395 | 20711  |
| <b>Kiffer</b>                    | 40337 | 265970 | 235855 | 142733 | 15926921 | 408476 | 365069  | 180836 | 19917  | 15719662 | 58996  | 960916 |

**Table S1.** Continuing...

|                                  | 13      | 14      | 15       | 16     | 17      | 18      | 19     | 20     | 21       | 22     | 23      | 24     |
|----------------------------------|---------|---------|----------|--------|---------|---------|--------|--------|----------|--------|---------|--------|
| <b>Bella di Giungo</b>           | 898427  | 1117472 | 9579502  | 0      | 718757  | 49042   | 66569  | 27200  | 9805832  | 0      | 1653141 | 583658 |
| <b>Turandot</b>                  | 2455644 | 2562395 | 8592146  | 0      | 1415723 | 693155  | 227430 | 5258   | 23674096 | 242848 | 2686952 | 276970 |
| <b>Moldova's early</b>           | 2400108 | 4122951 | 10261668 | 0      | 4339708 | 839434  | 92733  | 7724   | 19530214 | 563641 | 2209695 | 375049 |
| <b>Coscia</b>                    | 1405577 | 3327482 | 11858729 | 0      | 323859  | 84767   | 94445  | 19485  | 17647619 | 0      | 1804459 | 786061 |
| <b>Ilinjača</b>                  | 1179436 | 2085112 | 6709704  | 0      | 499428  | 1119497 | 97589  | 7471   | 16884786 | 0      | 1096446 | 171892 |
| <b>Carmen</b>                    | 2559127 | 4076648 | 11165678 | 48159  | 2192185 | 879296  | 189765 | 8361   | 32505124 | 583291 | 3466315 | 478560 |
| <b>Butirra precoce Morettini</b> | 1515486 | 1737503 | 5633291  | 0      | 957720  | 448409  | 308308 | 4380   | 20342314 | 0      | 1339077 | 373044 |
| <b>Precoce de Trevoux</b>        | 1139078 | 2975813 | 6808095  | 0      | 1616952 | 222696  | 294677 | 10084  | 16623417 | 0      | 1179137 | 196596 |
| <b>Santa Maria</b>               | 1657015 | 1026621 | 4776270  | 0      | 782172  | 106935  | 11463  | 368757 | 8408903  | 0      | 690858  | 684365 |
| <b>Williams'</b>                 | 3237576 | 2481636 | 8404543  | 157956 | 4650417 | 185601  | 198079 | 17970  | 22796310 | 912057 | 3878713 | 316601 |
| <b>Jeribasma</b>                 | 1499935 | 1049693 | 77510    | 0      | 1668564 | 1731    | 410319 | 0      | 22760303 | 468    | 4832821 | 4852   |
| <b>Abbé Fétel</b>                | 55249   | 1783320 | 11842107 | 0      | 384707  | 187207  | 126028 | 5697   | 17267120 | 104309 | 2819802 | 315793 |
| <b>Packham's Triumphy</b>        | 2945227 | 2028157 | 8558831  | 0      | 1067727 | 74353   | 152107 | 4946   | 17971225 | 23812  | 1229321 | 128347 |
| <b>Beurre Bosc</b>               | 456642  | 2629337 | 7294337  | 33957  | 1143958 | 66554   | 192388 | 6228   | 27398165 | 291239 | 1793077 | 261350 |
| <b>Alexander Lucas</b>           | 1196108 | 1672470 | 9509263  | 0      | 1658356 | 171221  | 273850 | 3546   | 15723802 | 212605 | 1186486 | 145032 |
| <b>Piore de Cure</b>             | 2028118 | 2341348 | 7688407  | 0      | 1787431 | 530717  | 249547 | 6223   | 28939535 | 0      | 3916960 | 326906 |
| <b>Niitaka</b>                   | 921561  | 1028426 | 4443519  | 0      | 553362  | 1332198 | 128584 | 5581   | 19926073 | 11450  | 951091  | 203405 |
| <b>Kumoi</b>                     | 43632   | 1038355 | 3581583  | 0      | 757166  | 747477  | 214390 | 2764   | 12199146 | 0      | 1411563 | 185282 |
| <b>Chojuro</b>                   | 40130   | 1257355 | 3829751  | 0      | 645092  | 1190258 | 141422 | 2117   | 10992825 | 0      | 739907  | 212947 |
| <b>Shinsui</b>                   | 1588502 | 2010169 | 6101203  | 0      | 1021585 | 83696   | 96009  | 57415  | 13984298 | 0      | 1600304 | 393580 |
| <b>Nijisseiki</b>                | 31196   | 1449498 | 7655591  | 81558  | 1244849 | 53653   | 182046 | 13755  | 18878130 | 0      | 2639212 | 341346 |
| <b>Kiffer</b>                    | 3088300 | 2268265 | 3980535  | 10387  | 2106778 | 572569  | 74646  | 109749 | 18180569 | 42765  | 1325947 | 165695 |

**Table S1.** Continuing...

|                                  | 25       | 26      | 27      | 28     | 29      | 30        | 31       | 32       | 33    | 34       | 35       | 36       |
|----------------------------------|----------|---------|---------|--------|---------|-----------|----------|----------|-------|----------|----------|----------|
| <b>Bella di Giungo</b>           | 13966498 | 6685    | 353416  | 39960  | 3003020 | 67395138  | 0        | 37135428 | 0     | 87403    | 8259     | 4888170  |
| <b>Turandot</b>                  | 9970921  | 3289101 | 1060052 | 28175  | 3665119 | 83048780  | 0        | 28680032 | 0     | 7590951  | 13449802 | 6958528  |
| <b>Moldova's early</b>           | 26010902 | 5975    | 1181654 | 38191  | 3949903 | 88079087  | 0        | 38044258 | 0     | 78568    | 8161     | 3894916  |
| <b>Coscia</b>                    | 22060844 | 1157437 | 929829  | 13953  | 2360722 | 79555217  | 0        | 24382642 | 0     | 1426552  | 2818435  | 12317861 |
| <b>Ilinjača</b>                  | 11289874 | 107554  | 938772  | 36754  | 2732790 | 62945082  | 0        | 20033650 | 38775 | 95680    | 160850   | 5522231  |
| <b>Carmen</b>                    | 15838880 | 1275849 | 1758758 | 42459  | 2800761 | 105532003 | 0        | 30557194 | 0     | 2443422  | 5113674  | 13885430 |
| <b>Butirra precoce Morettini</b> | 7470593  | 2742774 | 771841  | 36948  | 3551500 | 43783929  | 0        | 32931129 | 28269 | 3401224  | 6631296  | 4428135  |
| <b>Precoce de Trevoux</b>        | 10438468 | 4483241 | 531731  | 44124  | 5419777 | 44526033  | 0        | 30871625 | 0     | 9411888  | 15648819 | 5575494  |
| <b>Santa Maria</b>               | 5846173  | 1664205 | 350088  | 28472  | 1591346 | 38500888  | 61495    | 9316567  | 0     | 4894203  | 9382658  | 1347412  |
| <b>Williams'</b>                 | 10231828 | 5258370 | 1208819 | 35713  | 3632258 | 74237786  | 0        | 17697974 | 0     | 10750515 | 17851681 | 13687097 |
| <b>Jeribasma</b>                 | 5228760  | 1786064 | 447223  | 134432 | 22309   | 76497089  | 4390458  | 8867398  | 0     | 8484     | 1381253  | 10340123 |
| <b>Abbé Fétel</b>                | 13308135 | 1399259 | 533920  | 22451  | 2511839 | 98724223  | 0        | 22291381 | 0     | 1695502  | 2942475  | 18096954 |
| <b>Packham's Triumphy</b>        | 10388384 | 3314051 | 761425  | 89420  | 3793850 | 72026905  | 0        | 24556928 | 0     | 4025793  | 7701920  | 17462284 |
| <b>Beurre Bosc</b>               | 9682385  | 0       | 1076905 | 138207 | 3924042 | 64980447  | 0        | 31382100 | 0     | 86220    | 0        | 17425840 |
| <b>Alexander Lucas</b>           | 8442178  | 2898664 | 468024  | 66467  | 2481875 | 70868859  | 0        | 12390753 | 40027 | 5290975  | 9034999  | 8613365  |
| <b>Piore de Cure</b>             | 9249470  | 4919523 | 1016762 | 78191  | 3172080 | 74908263  | 1299681  | 25363126 | 42272 | 4938720  | 10394908 | 6884724  |
| <b>Niitaka</b>                   | 2706202  | 871433  | 266292  | 72916  | 191914  | 35270612  | 11477003 | 8050593  | 0     | 639149   | 1133486  | 2263971  |
| <b>Kumoi</b>                     | 3013926  | 1016378 | 203499  | 36489  | 112919  | 25575558  | 9239758  | 2463294  | 0     | 1051813  | 1579572  | 265511   |
| <b>Chojuro</b>                   | 3863697  | 946689  | 245637  | 26290  | 146541  | 26270610  | 8987011  | 10903154 | 0     | 1191532  | 1812061  | 327464   |
| <b>Shinsui</b>                   | 6061301  | 1886730 | 313635  | 68321  | 63089   | 37073503  | 4292107  | 6793567  | 0     | 2461255  | 4427071  | 1077307  |
| <b>Nijisseiki</b>                | 4999966  | 2327931 | 195479  | 50104  | 117628  | 45629260  | 6083467  | 11057577 | 0     | 3320185  | 5427448  | 3233810  |
| <b>Kiffer</b>                    | 9412694  | 3263154 | 966120  | 32837  | 1349218 | 41330099  | 5752127  | 5790053  | 0     | 6518043  | 11491118 | 5695569  |

**Table S1.** Continuing...

|                                  | 37      | 38       | 39    | 40       | 41       | 42      | 43     | 44     | 45       | 46       | 47      | 48       |
|----------------------------------|---------|----------|-------|----------|----------|---------|--------|--------|----------|----------|---------|----------|
| <b>Bella di Giungo</b>           | 0       | 9177805  | 0     | 9848311  | 7812705  | 3384600 | 8362   | 0      | 14826465 | 25073    | 180497  | 0        |
| <b>Turandot</b>                  | 0       | 8055989  | 0     | 9853261  | 4724792  | 3137509 | 78804  | 42210  | 14014030 | 0        | 1572495 | 21349    |
| <b>Moldova's early</b>           | 0       | 7648138  | 0     | 12495348 | 5033174  | 7158246 | 0      | 0      | 5378038  | 47238    | 301663  | 10008    |
| <b>Coscia</b>                    | 0       | 4235431  | 16028 | 12291974 | 1352993  | 3189975 | 12921  | 0      | 12623058 | 7721     | 632366  | 9104     |
| <b>Ilinjača</b>                  | 0       | 3024621  | 3270  | 4979627  | 8463121  | 2731434 | 6397   | 0      | 3441586  | 0        | 249001  | 0        |
| <b>Carmen</b>                    | 0       | 6863593  | 2740  | 11826448 | 3103098  | 4177050 | 75173  | 0      | 23463929 | 10066    | 1638196 | 18193    |
| <b>Butirra precoce Morettini</b> | 0       | 7780899  | 0     | 5116532  | 10251358 | 2788380 | 30578  | 29285  | 9814883  | 15235    | 1123870 | 21910    |
| <b>Precoce de Trevoux</b>        | 0       | 10022020 | 0     | 6401347  | 4229542  | 2385610 | 118490 | 42807  | 9422950  | 0        | 2497336 | 69625    |
| <b>Santa Maria</b>               | 0       | 873092   | 3202  | 2717032  | 3098073  | 2303891 | 167168 | 4520   | 2377332  | 60666    | 1291821 | 48558    |
| <b>Williams'</b>                 | 0       | 4330784  | 1333  | 8999465  | 2662354  | 4239282 | 109750 | 109170 | 12107363 | 17889    | 2807526 | 38036    |
| <b>Jeribasma</b>                 | 484069  | 3095640  | 0     | 9452405  | 1473517  | 2142202 | 82613  | 0      | 6208732  | 13772356 | 14135   | 7801419  |
| <b>Abbé Fétel</b>                | 0       | 4918092  | 0     | 11590991 | 1444568  | 2622291 | 498704 | 0      | 18975110 | 13043    | 1040422 | 11451    |
| <b>Packham's Triumphy</b>        | 0       | 522820   | 2269  | 11108092 | 1152693  | 2868370 | 153113 | 42676  | 17182974 | 140032   | 958786  | 82231    |
| <b>Beurre Bosc</b>               | 0       | 7005009  | 17279 | 10631606 | 3391019  | 2989842 | 12880  | 0      | 17056454 | 21230    | 240057  | 13274    |
| <b>Alexander Lucas</b>           | 0       | 2558124  | 0     | 6766104  | 4265525  | 2542416 | 50908  | 30887  | 7564697  | 20114    | 2664648 | 15397    |
| <b>Piore de Cure</b>             | 0       | 7112598  | 0     | 5863430  | 2697929  | 1691688 | 26510  | 0      | 5384308  | 1581124  | 1123605 | 668257   |
| <b>Niitaka</b>                   | 1075582 | 1066773  | 26718 | 4135517  | 4493387  | 1078040 | 168566 | 0      | 3071358  | 28645685 | 2063113 | 11037449 |
| <b>Kumoi</b>                     | 387529  | 0        | 4310  | 3426535  | 2079273  | 1083058 | 346135 | 0      | 30288    | 13129727 | 2776230 | 339203   |
| <b>Chojuro</b>                   | 406106  | 20423    | 0     | 5875841  | 4307034  | 911526  | 393215 | 0      | 85308    | 23909423 | 2366733 | 1537270  |
| <b>Shinsui</b>                   | 229910  | 1051469  | 3968  | 10548372 | 1614881  | 769930  | 26762  | 0      | 2762419  | 22009002 | 2316385 | 11739690 |
| <b>Nijisseiki</b>                | 133384  | 574927   | 1743  | 10371262 | 1381207  | 547038  | 12541  | 662    | 4641704  | 24639798 | 4129209 | 12256033 |
| <b>Kiffer</b>                    | 0       | 1921161  | 4309  | 5575941  | 1934051  | 4076629 | 73891  | 52711  | 6218683  | 8894619  | 2583209 | 11524715 |

**Table S1.** Continuing...

|                                  | 49      | 50       | 51      | 52     | 53     | 54      | 55     | 56     | 57      | 58     | 59    | 60    |
|----------------------------------|---------|----------|---------|--------|--------|---------|--------|--------|---------|--------|-------|-------|
| <b>Bella di Giungo</b>           | 4811773 | 6662017  | 843891  | 0      | 0      | 609053  | 92564  | 0      | 674853  | 0      | 0     | 0     |
| <b>Turandot</b>                  | 4899720 | 7919637  | 882335  | 0      | 7781   | 0       | 302653 | 0      | 37037   | 0      | 0     | 26487 |
| <b>Moldova's early</b>           | 4392477 | 2783909  | 4173408 | 0      | 0      | 26774   | 315213 | 0      | 61282   | 0      | 21942 | 7507  |
| <b>Coscia</b>                    | 1736070 | 6692875  | 2562479 | 0      | 3493   | 549527  | 0      | 0      | 531328  | 0      | 0     | 9306  |
| <b>Ilinjača</b>                  | 1572547 | 896398   | 162627  | 0      | 4270   | 0       | 416819 | 0      | 22980   | 0      | 12345 | 35401 |
| <b>Carmen</b>                    | 5284414 | 14329697 | 2016531 | 0      | 10404  | 10112   | 313315 | 0      | 55681   | 0      | 9535  | 37532 |
| <b>Butirra precoce Morettini</b> | 5120193 | 3828264  | 618742  | 0      | 0      | 44783   | 515214 | 0      | 83567   | 0      | 0     | 7619  |
| <b>Precoce de Trevoux</b>        | 3644397 | 4846740  | 413904  | 0      | 0      | 184824  | 260153 | 0      | 153951  | 0      | 14748 | 13691 |
| <b>Santa Maria</b>               | 436173  | 267164   | 234012  | 0      | 24902  | 2393970 | 196240 | 10284  | 7469695 | 0      | 0     | 18129 |
| <b>Williams'</b>                 | 3115043 | 7473695  | 781674  | 0      | 0      | 8978    | 621547 | 0      | 46072   | 0      | 0     | 9432  |
| <b>Jeribasma</b>                 | 1118387 | 4289378  | 563477  | 33529  | 13284  | 0       | 4903   | 12391  | 10857   | 15270  | 0     | 6221  |
| <b>Abbé Fétel</b>                | 2921416 | 9902925  | 845521  | 0      | 0      | 7633    | 299176 | 0      | 23784   | 0      | 0     | 4522  |
| <b>Packham's Triumphy</b>        | 289968  | 1477778  | 598170  | 0      | 0      | 6804    | 554044 | 0      | 20929   | 0      | 0     | 4586  |
| <b>Beurre Bosc</b>               | 4768957 | 10366242 | 551493  | 0      | 5689   | 1092    | 76400  | 0      | 29975   | 0      | 0     | 21075 |
| <b>Alexander Lucas</b>           | 3382710 | 3754707  | 501238  | 0      | 0      | 0       | 430611 | 0      | 20403   | 0      | 11713 | 0     |
| <b>Piore de Cure</b>             | 1444764 | 1975197  | 162735  | 0      | 11108  | 0       | 79499  | 0      | 33075   | 0      | 0     | 55282 |
| <b>Niitaka</b>                   | 82838   | 916855   | 198101  | 0      | 29860  | 0       | 474744 | 11511  | 14389   | 19396  | 0     | 19521 |
| <b>Kumoi</b>                     | 152333  | 0        | 190415  | 24065  | 8131   | 0       | 347408 | 0      | 13531   | 0      | 0     | 10632 |
| <b>Chojuro</b>                   | 272806  | 0        | 394567  | 196634 | 140346 | 81027   | 326734 | 54883  | 14121   | 0      | 10616 | 10720 |
| <b>Shinsui</b>                   | 109114  | 1811617  | 1063667 | 91611  | 426279 | 134965  | 449991 | 217800 | 16082   | 239779 | 16756 | 13311 |
| <b>Nijisseiki</b>                | 194399  | 1896568  | 1041916 | 48640  | 81465  | 82559   | 229204 | 74659  | 19543   | 66033  | 0     | 12798 |
| <b>Kiffer</b>                    | 120066  | 2350830  | 920403  | 0      | 700632 | 100552  | 544657 | 60650  | 38273   | 277106 | 0     | 6728  |

**Table S2.** Correlation Matrix of Quantitated Polyphenols, TPC, and RSA.

|     | 1      | 8      | 11     | 15     | 16     | 18     | 20     | 22     | 24     | 29     | 33     | 34     | 39     | 44     | 47     | 54     | 55     | TPC   | RSA |
|-----|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|-----|
| 1   | 1      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |       |     |
| 8   | 0.531  | 1      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |       |     |
| 11  | -0.449 | -0.31  | 1      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |       |     |
| 15  | 0.268  | 0.049  | -0.197 | 1      |        |        |        |        |        |        |        |        |        |        |        |        |        |       |     |
| 16  | 0.187  | 0.219  | -0.203 | 0.142  | 1      |        |        |        |        |        |        |        |        |        |        |        |        |       |     |
| 18  | 0.045  | 0.001  | 0.08   | -0.354 | -0.104 | 1      |        |        |        |        |        |        |        |        |        |        |        |       |     |
| 20  | -0.254 | -0.196 | -0.149 | -0.31  | -0.058 | -0.216 | 1      |        |        |        |        |        |        |        |        |        |        |       |     |
| 22  | 0.119  | 0.145  | -0.237 | 0.405  | 0.817  | 0.044  | -0.15  | 1      |        |        |        |        |        |        |        |        |        |       |     |
| 24  | -0.132 | -0.122 | -0.095 | 0.379  | -0.005 | -0.369 | 0.421  | 0      | 1      |        |        |        |        |        |        |        |        |       |     |
| 29  | 0.369  | 0.359  | -0.349 | 0.485  | 0.227  | -0.253 | -0.19  | 0.375  | -0.012 | 1      |        |        |        |        |        |        |        |       |     |
| 33  | 0.549  | 0.478  | -0.479 | 0.007  | -0.179 | 0.056  | -0.184 | -0.185 | -0.125 | 0.142  | 1      |        |        |        |        |        |        |       |     |
| 34  | 0.028  | 0.477  | -0.228 | -0.054 | 0.466  | -0.255 | 0.174  | 0.305  | -0.203 | 0.358  | -0.062 | 1      |        |        |        |        |        |       |     |
| 39  | -0.166 | -0.374 | 0.285  | -0.147 | -0.007 | 0.195  | -0.021 | -0.105 | 0.073  | -0.256 | -0.241 | -0.342 | 1      |        |        |        |        |       |     |
| 44  | -0.305 | 0.013  | 0.158  | -0.379 | 0.192  | -0.009 | -0.006 | 0.014  | -0.337 | -0.493 | -0.159 | 0.474  | -0.122 | 1      |        |        |        |       |     |
| 47  | 0.135  | 0.494  | -0.287 | -0.029 | 0.668  | -0.218 | -0.028 | 0.483  | -0.284 | 0.394  | -0.04  | 0.826  | -0.248 | 0.323  | 1      |        |        |       |     |
| 54  | -0.184 | -0.228 | -0.142 | -0.142 | -0.119 | -0.286 | 0.925  | -0.205 | 0.616  | -0.102 | -0.197 | 0.06   | 0.007  | -0.149 | -0.151 | 1      |        |       |     |
| 55  | -0.04  | 0.139  | -0.128 | -0.316 | 0.301  | 0.214  | -0.106 | 0.223  | -0.518 | -0.111 | 0.13   | 0.284  | -0.154 | 0.354  | 0.584  | -0.337 | 1      |       |     |
| TPC | -0.184 | -0.279 | 0.097  | 0.486  | 0.27   | -0.508 | 0.455  | 0.276  | 0.703  | 0.1    | -0.51  | 0.058  | 0.047  | -0.154 | -0.053 | 0.546  | -0.447 | 1     |     |
| RSA | -0.144 | -0.285 | 0.185  | 0.456  | 0.202  | -0.262 | 0.348  | 0.258  | 0.721  | -0.078 | -0.434 | -0.181 | 0.319  | -0.258 | -0.223 | 0.446  | -0.427 | 0.855 | 1   |