

Dr. Duke's Phytochemical and Ethnobotanical Databases

Chemicals found in *Hydrangea arborescens*

| Activities Count | Chemical | Plant Part | Low PPM | High PPM | StdDev | Reference Citation |
|------------------|----------------|------------|---------|----------|----------------------|---|
| 39 | NIACIN | Root | 44.0 | 125.0 | 2.1667485756558618 | -- |
| 14 | POTASSIUM | Root | 9034.0 | 25810.0 | 0.73452011339059 | -- |
| 4 | PHOSPHORUS | Root | 2450.0 | 7000.0 | 0.6118650125540502 | -- |
| 0 | PROTEIN | Root | 56700.0 | 162000.0 | 0.4894586911777774 | -- |
| 0 | FIBER(CRUDE) | Root | | 120000.0 | 0.2580364813561677 | -- |
| 24 | CHROMIUM | Root | 0.9 | 2.5 | -0.06165886683144246 | -- |
| 0 | FAT | Root | 7000.0 | 20000.0 | -0.09603792277020924 | -- |
| 28 | CALCIUM | Root | 2261.0 | 6460.0 | -0.10325408809694175 | -- |
| 5 | ALUMINUM | Root | 77.0 | 221.0 | -0.1939011464249492 | -- |
| 0 | FIBER(DIETARY) | Root | | 380000.0 | -0.20125931618604387 | -- |
| 4 | SILICON | Root | 8.0 | 22.3 | -0.24046542681013774 | -- |
| 60 | SELENIUM | Root | 0.6 | 1.6 | -0.24863436856020282 | -- |
| 14 | MANGANESE | Root | 7.0 | 18.7 | -0.3225779619590914 | -- |
| 0 | ASH | Root | 18900.0 | 54000.0 | -0.3871778963297542 | -- |
| 6 | IRON | Root | 6.0 | 18.0 | -0.41550297627696336 | -- |
| 0 | SUGARS | Root | 21000.0 | 60000.0 | -0.424742309250878 | -- |
| 2 | COBALT | Root | 1.3 | 3.8 | -0.4627294331957213 | -- |
| 65 | MAGNESIUM | Root | 567.0 | 1620.0 | -0.5010009675178397 | -- |
| 4 | TIN | Root | 4.0 | 11.0 | -0.5576712458191766 | -- |
| 0 | GUM | Root | 31500.0 | 90000.0 | -0.6755279625367215 | -- |
| 0 | WATER | Root | | 650000.0 | -0.7804888095818918 | -- |
| 0 | RESIN | Root | | | | List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979. |
| 0 | SKIMMIN | Shoot | | | | Plouvier, V. 1987. Occurrence and distribution of syringoside, skimmin and similar coumarin glycosides and loganin in several botanical groups. C. R. Acad. Sci. Ser. III, 305(6): 183-186. |

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|------------------|---------------|------------|---------|----------|--------|--|
| 53 | BETA-CAROTENE | Root | | | | -- |
| 176 | QUERCETIN | Root | | | | Williamson, E. M. and Evans, F. J., Potter's New Cyclopaedia of Botanical Drugs and Preparations, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989. |
| 0 | NEOHYDRANGIN | Shoot | | | | Plouvier, V. 1987. Occurrence and distribution of syringoside, skimmin and similar coumarin glycosides and loganin in several botanical groups. C. R. Acad. Sci. Ser. III, 305(6): 183-186. |
| 112 | ASCORBIC-ACID | Root | | | | -- |
| 4 | LOGANIN | Shoot | | | | Plouvier, V. 1987. Occurrence and distribution of syringoside, skimmin and similar coumarin glycosides and loganin in several botanical groups. C. R. Acad. Sci. Ser. III, 305(6): 183-186. |
| 77 | ZINC | Root | | | | -- |
| 0 | THIAMINE | Root | | | | -- |
| 15 | RIBOFLAVIN | Root | | | | -- |
| 1 | SODIUM | Root | | | | -- |
| 75 | KAEMPFEROL | Root | | | | Williamson, E. M. and Evans, F. J., Potter's New Cyclopaedia of Botanical Drugs and Preparations, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989. |
| 0 | SAPONIN | Root | | | | List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979. |
| 22 | UMBELLIFERONE | Shoot | | | | Plouvier, V. 1987. Occurrence and distribution of syringoside, skimmin and similar coumarin glycosides and loganin in several botanical groups. C. R. Acad. Sci. Ser. III, 305(6): 183-186. |

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|------------------|-----------|------------|---------|----------|--------|--|
| 0 | HYDRANGIN | Root | | | | List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979. |
| 87 | RUTIN | Root | | | | List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979. |
| 5 | STARCH | Root | | | | Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp. |
| 0 | EO | Root | | | | List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979. |