

Dr. Duke's Phytochemical and Ethnobotanical Databases

Chemicals found in *Ilex paraguariensis*

| Activities Count | Chemical                 | Plant Part | Low PPM | High PPM | StdDev               | Refernce Citation |
|------------------|--------------------------|------------|---------|----------|----------------------|-------------------|
| 89               | URSOLIC-ACID             | Leaf       |         |          |                      | --                |
| 87               | RUTIN                    | Leaf       |         |          |                      | --                |
| 77               | CHLOROGENIC-ACID         | Leaf       |         |          |                      | --                |
| 62               | CAFFEINE                 | Leaf       | 2000.0  | 20000.0  | -0.44207532185590015 | --                |
| 43               | PYRIDOXINE               | Leaf       |         |          |                      | --                |
| 36               | THEOPHYLLINE             | Leaf       | 0.0     | 500.0    | 1.0                  | --                |
| 35               | TANNIN                   | Leaf       | 40000.0 | 160000.0 | 0.6039221294970823   | --                |
| 28               | VANILLIN                 | Leaf       |         |          |                      | --                |
| 21               | THEOBROMINE              | Leaf       | 960.0   | 5000.0   | 1.0                  | --                |
| 21               | CHLOROPHYLL              | Leaf       |         | 19000.0  | -0.2398973754016489  | --                |
| 20               | CHOLINE                  | Leaf       |         |          |                      | --                |
| 15               | RIBOFLAVIN               | Leaf       |         |          |                      | --                |
| 15               | FIBER                    | Leaf       |         | 176800.0 | 0.18877021553548767  | --                |
| 15               | TRIGONELLINE             | Leaf       |         |          |                      | --                |
| 11               | PANTOTHENIC-ACID         | Leaf       |         |          |                      | --                |
| 11               | NICOTINIC-ACID           | Leaf       |         |          |                      | --                |
| 9                | BETA-AMYRIN              | Leaf       |         |          |                      | --                |
| 8                | INOSITOL                 | Leaf       |         |          |                      | --                |
| 8                | STEARIC-ACID             | Leaf       |         |          |                      | --                |
| 6                | BUTYRIC-ACID             | Leaf       |         |          |                      | --                |
| 5                | ISOVALERIC-ACID          | Leaf       |         |          |                      | --                |
| 2                | NEO-CHLOROGENIC-ACID     | Leaf       |         |          |                      | --                |
| 2                | ISOBUTYRIC-ACID          | Leaf       |         |          |                      | --                |
| 1                | 5-O-CAFFEYOYLQUINIC-ACID | Leaf       |         |          |                      | --                |
| 0                | WATER                    | Seed       |         | 72000.0  | -0.5971293485746952  | --                |
| 0                | RESINIC-ACID             | Leaf       |         |          |                      | --                |
| 0                | ISOCAPRONIC-ACID         | Leaf       |         |          |                      | --                |

| Activities Count | Chemical         | Plant Part | Low PPM  | High PPM | StdDev               | Refernce Citation |
|------------------|------------------|------------|----------|----------|----------------------|-------------------|
| 0                | WATER            | Leaf       |          | 55000.0  | -3.7548957945142525  | --                |
| 0                | ASH              | Seed       |          | 13000.0  | -1.0491111510661388  | --                |
| 0                | RESIN            | Leaf       |          | 48000.0  | -0.37305110431736865 | --                |
| 0                | ASH              | Leaf       |          | 42500.0  | -1.3452230844968343  | --                |
| 0                | PROTEIN          | Seed       | 64000.0  | 69000.0  | -1.4659463648914988  | --                |
| 0                | FAT              | Seed       | 161000.0 | 173000.0 | -0.48663849003238874 | --                |
| 0                | 4-OXOLAURIC-ACID | Leaf       |          |          |                      | --                |
| 0                | PROTEIN          | Leaf       |          | 190000.0 | -0.2179254748399875  | --                |
| 0                | EO               | Leaf       |          | 3000.0   | -0.7507396833089339  | --                |
| 0                | 2,5-XYLENOL      | Leaf       |          |          |                      | --                |
| 0                | PRBER            | Seed       | 520000.0 | 560000.0 |                      | --                |
| 0                | NITROGEN         | Leaf       |          | 30000.0  | -0.6884022915379184  | --                |