

**Dr. Duke's Phytochemical and Ethnobotanical Database**

**Chemicals Found in *Acacia farnesiana***

| Activity Count | Chemical          | Plant Part | Low PPM | High PPM | StdDev               | Reference Citation   |
|----------------|-------------------|------------|---------|----------|----------------------|--|
| 4              | (+)-CATECHOL      | Plant      | --      | --       |                      | J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.   |
| 3              | ALANINE           | Leaf       | 3440    | 18450    | 1.3615480815328946   | CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses  |
| 5              | ALPHA-IONONE      | Flower     | --      | --       |                      | Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.                           |
| 2              | ALPHA-SPINASTEROL | Seed       | --      | --       |                      | Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.                                   |
| 2              | ALPHA-SPINASTEROL | Plant      | --      | --       |                      | Pakistan Encyclopedia Planta Medica. 1986.   |
| 23             | ALPHA-TERPINEOL   | Flower     | --      | --       |                      | Guenther, E., The Essential Oils, 6 volumes, D. van Nostrand, New York, 1948-1952.   |
| 7              | ANISALDEHYDE      | Flower     | --      | --       |                      | Rizk, A.F.M. and Al-Nowaihi, A.S., The Phytochemistry of the Horticultural Plants of Qatar, Scientific and Applied Research Centre, University of Qatar. |
| 14             | ARGININE          | Leaf       | 7360    | 39480    | 1.3871175969782887   | CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses  |
| 3              | AROMADENDRIN      | Plant      | --      | --       |                      | Rizk, A.F.M. and Al-Nowaihi, A.S., The Phytochemistry of the Horticultural Plants of Qatar, Scientific and Applied Research Centre, University of Qatar. |
| 112            | ASCORBIC-ACID     | Leaf       | 490     | 2636     | -0.19933288649781924 | CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses  |
| 3              | ASPARTIC-ACID     | Plant      | 7040    | 37770    | 1.3374636299085358   |  |
| 24             | BENZALDEHYDE      | Flower     | --      | --       |                      | Pakistan Encyclopedia Planta Medica. 1986.   |

| Activity Count | Chemical       | Plant Part | Low PPM | High PPM | StdDev              | Reference Citation   |
|----------------|----------------|------------|---------|----------|---------------------|--|
| 24             | BENZALDEHYDE   | Plant      | --      | --       |                     | Pakistan Encyclopedia Planta Medica. 1986.   |
| 20             | BENZOIC-ACID   | Plant      | --      | --       |                     |  |
| 20             | BENZOIC-ACID   | Flower     | --      | --       |                     |  |
| 9              | BENZYL-ALCOHOL | Flower     | --      | --       |                     |  |
| 53             | BETA-CAROTENE  | Leaf       | 120     | 646      | 1.6753562972527778  | CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses  |
| 13             | BETA-IONONE    | Flower     | --      | --       |                     | Rizk, A.F.M. and Al-Nowaihi, A.S., The Phytochemistry of the Horticultural Plants of Qatar, Scientific and Applied Research Centre, University of Qatar. |
| 6              | BUTYRIC-ACID   | Plant      | --      | --       |                     |  |
| 6              | BUTYRIC-ACID   | Flower     | --      | --       |                     |  |
| 28             | CALCIUM        | Leaf       | 930     | 5003     | -0.917925931191467  | CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses  |
| 28             | CALCIUM        | Seed       | 3900    | 5500     | 0.24859598148301348 | CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses  |
| 2              | CAMPESTEROL    | Seed       | --      | --       |                     | Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.                                   |
| 2              | CAMPESTEROL    | Plant      | --      | --       |                     | Pakistan Encyclopedia Planta Medica. 1986.   |
| 1              | CHOLESTEROL    | Seed       | --      | --       |                     | Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.                                   |
| 1              | CHOLESTEROL    | Plant      | --      | --       |                     | Pakistan Encyclopedia Planta Medica. 1986.   |
| 57             | COUMARIN       | Flower     | --      | --       |                     | Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.                                   |

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|----------------|-----------------|------------|---------|----------|---------------------|--|
| 57             | COUMARIN        | Plant      | --      | --       |                     | Pakistan Encyclopedia Planta Medica. 1986.   |
| 10             | CUMINALDEHYDE   | Plant      | --      | --       |                     |  |
| 10             | CUMINALDEHYDE   | Flower     | --      | --       |                     | Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.                                   |
| 2              | CYSTINE         | Seed       | 700     | 750      | -1.6696102828167267 | Rizk, A.F.M. and Al-Nowaihi, A.S., The Phytochemistry of the Horticultural Plants of Qatar, Scientific and Applied Research Centre, University of Qatar. |
| 51             | ELLAGIC-ACID    | Fruit      | --      | --       |                     |  |
| 51             | ELLAGIC-ACID    | Plant      | --      | --       |                     |  |
| 76             | EUGENOL         | Flower     | --      | --       |                     | CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses  |
| 17             | FARNESOL        | Flower     | --      | --       |                     | Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.                                   |
| 17             | FARNESOL        | Plant      | --      | --       |                     |  |
| 15             | FIBER           | Leaf       | 57000   | 306000   | 1.786476373006545   | CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses  |
| 62             | GALLIC-ACID     | Flower     | --      | --       |                     | Wealth of India.   |
| 62             | GALLIC-ACID     | Plant      | --      | --       |                     |  |
| 35             | GERANIOL        | Flower     | --      | --       |                     | Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.                           |
| 5              | GERANYL-ACETATE | Flower     | --      | --       |                     | Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.                           |

| Activity Count | Chemical                  | Plant Part | Low PPM | High PPM | StdDev              | Reference Citation   |
|----------------|---------------------------|------------|---------|----------|---------------------|--|
| 8              | GLUTAMIC-ACID             | Leaf       | 10080   | 54070    | 0.8730215200517875  | CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses  |
| 12             | GLYCINE                   | Leaf       | 2720    | 14590    | 1.1085158262772645  | CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses  |
| 9              | HCN                       | Leaf       | --      | 4.495    | -1.1674032562088021 | Rizk, A.F.M. and Al-Nowaihi, A.S., The Phytochemistry of the Horticultural Plants of Qatar, Scientific and Applied Research Centre, University of Qatar. |
| 7              | HISTIDINE                 | Leaf       | 1840    | 9870     | 2.255186144347604   | CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses  |
| 6              | IRON                      | Leaf       | 37      | 199      | -0.4161653734377091 | CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses  |
| 3              | ISOLEUCINE                | Seed       | 1075    | 1100     | -1.1983767279324409 | Rizk, A.F.M. and Al-Nowaihi, A.S., The Phytochemistry of the Horticultural Plants of Qatar, Scientific and Applied Research Centre, University of Qatar. |
| 3              | ISOLEUCINE                | Leaf       | 2800    | 15020    | 0.7615009868426974  | CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses  |
| 2              | ISORHAMNETIN-3-RUTINOSIDE | Plant      | --      | --       |                     | J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.   |
| 75             | KAEMPFEROL                | Plant      | --      | --       |                     |  |
| 75             | KAEMPFEROL                | Fruit      | --      | --       |                     |  |
| 1              | KAEMPFEROL-7-GLUCOSIDE    | Plant      | --      | --       |                     | Rizk, A.F.M. and Al-Nowaihi, A.S., The Phytochemistry of the Horticultural Plants of Qatar, Scientific and Applied Research Centre, University of Qatar. |
| 2              | LEUCINE                   | Leaf       | 6000    | 32190    | 2.414102856680727   | CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses  |

| Activity Count | Chemical        | Plant Part | Low PPM | High PPM | StdDev               | Reference Citation   |
|----------------|-----------------|------------|---------|----------|----------------------|--|
| 2              | LEUCINE         | Seed       | 3700    | 3750     | -1.27607066721136    | Rizk, A.F.M. and Al-Nowaihi, A.S., The Phytochemistry of the Horticultural Plants of Qatar, Scientific and Applied Research Centre, University of Qatar. |
| 53             | LINALOOL        | Plant      | --      | --       |                      | Pakistan Encyclopedia Planta Medica. 1986.   |
| 53             | LINALOOL        | Flower     | --      | --       |                      | Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.                                   |
| 7              | LINALYL-ACETATE | Plant      | --      | --       |                      | Pakistan Encyclopedia Planta Medica. 1986.   |
| 7              | LINALYL-ACETATE | Flower     | --      | --       |                      | Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.                                   |
| 2              | LINAMARIN       | Plant      | --      | --       |                      | Rizk, A.F.M. and Al-Nowaihi, A.S., The Phytochemistry of the Horticultural Plants of Qatar, Scientific and Applied Research Centre, University of Qatar. |
| 27             | LINOLEIC-ACID   | Seed       | 12800   | 50000    | -0.48942865171816513 |  |
| 2              | LOTAUSTRALIN    | Plant      | --      | --       |                      | Rizk, A.F.M. and Al-Nowaihi, A.S., The Phytochemistry of the Horticultural Plants of Qatar, Scientific and Applied Research Centre, University of Qatar. |
| 4              | LYSINE          | Leaf       | 3760    | 20170    | 1.6628021945345992   | CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses  |
| 4              | LYSINE          | Seed       | 1750    | 1800     | -1.3950017923225162  | Rizk, A.F.M. and Al-Nowaihi, A.S., The Phytochemistry of the Horticultural Plants of Qatar, Scientific and Applied Research Centre, University of Qatar. |
| 15             | METHIONINE      | Seed       | 175     | 200      | -1.0625192949985425  | Rizk, A.F.M. and Al-Nowaihi, A.S., The Phytochemistry of the Horticultural Plants of Qatar, Scientific and Applied Research Centre, University of Qatar. |
| 15             | METHIONINE      | Leaf       | 700     | 3860     | 0.6425258768913413   | CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses  |

| Activity Count | Chemical          | Plant Part | Low PPM | High PPM | StdDev             | Reference Citation   |
|----------------|-------------------|------------|---------|----------|--------------------|--|
| 20             | METHYL-EUGENOL    | Flower     | --      | --       |                    | CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses  |
| 16             | METHYL-GALLATE    | Plant      | --      | --       |                    |  |
| 16             | METHYL-GALLATE    | Fruit      | --      | --       |                    |  |
| 21             | METHYL-SALICYLATE | Flower     | --      | --       |                    | CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses  |
| 3              | MUCILAGE          | Plant      | --      | --       |                    | Pakistan Encyclopedia Planta Medica. 1986.   |
| 56             | NARINGENIN        | Fruit      | --      | --       |                    | Wealth of India.   |
| 11             | NEROLIDOL         | Flower     | --      | --       |                    | Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980. |
| 39             | NIACIN            | Leaf       | 85      | 457      | 4.37280098796833   | CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses  |
| 2              | NONACOSANE        | Plant      | --      | --       |                    | Pakistan Encyclopedia Planta Medica. 1986.   |
| 2              | NONACOSANE        | Flower     | --      | --       |                    | Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.         |
| 18             | OLEIC-ACID        | Seed       | 4200    | 16000    | -0.847570817071624 |  |
| 8              | P-CRESOL          | Flower     | --      | --       |                    | Guenther, E., The Essential Oils, 6 volumes, D. van Nostrand, New York, 1948-1952.   |
| 13             | PALMITIC-ACID     | Flower     | --      | --       |                    | Guenther, E., The Essential Oils, 6 volumes, D. van Nostrand, New York, 1948-1952.   |
| 13             | PALMITIC-ACID     | Seed       | 2400    | 9500     | -0.503585224724406 |  |
| 7              | PHENYLALANINE     | Leaf       | 2800    | 15020    | 1.2243440357218753 | CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses  |

| Activity Count | Chemical       | Plant Part | Low PPM | High PPM | StdDev               | Reference Citation   |
|----------------|----------------|------------|---------|----------|----------------------|--|
| 7              | PHENYLALANINE  | Seed       | 1450    | 1500     | -1.1990056353773155  | Rizk, A.F.M. and Al-Nowaihi, A.S., The Phytochemistry of the Horticultural Plants of Qatar, Scientific and Applied Research Centre, University of Qatar. |
| 4              | PHOSPHORUS     | Leaf       | 840     | 4519     | -0.08324574404567579 | CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses  |
| 4              | PHOSPHORUS     | Seed       | 2000    | 2700     | -0.7011725748825549  | CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses  |
| 5              | PINITOL        | Flower     | --      | --       |                      | Wealth of India.   |
| 2              | PIPECOLIC-ACID | Plant      | --      | --       |                      | Rizk, A.F.M. and Al-Nowaihi, A.S., The Phytochemistry of the Horticultural Plants of Qatar, Scientific and Applied Research Centre, University of Qatar. |
| 15             | RIBOFLAVIN     | Leaf       | 2       | 9        | -0.13567415267130314 | CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses  |
| 87             | RUTIN          | Leaf       | --      | --       |                      | Wealth of India.   |
| 34             | SALICYLIC-ACID | Plant      | --      | --       |                      |  |
| 34             | SALICYLIC-ACID | Flower     | --      | --       |                      |  |
| 1              | SERINE         | Leaf       | 3280    | 17600    | 1.5524961353748998   | CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses  |
| 8              | STEARIC-ACID   | Seed       | 600     | 2300     | -0.515487850383026   |  |
| 12             | STIGMASTEROL   | Plant      | --      | --       |                      | Pakistan Encyclopedia Planta Medica. 1986.   |
| 12             | STIGMASTEROL   | Seed       | --      | --       |                      | Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.                                   |
| 31             | THIAMIN        | Leaf       | 2       | 11       | 0.5617191393000665   | CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses  |

| Activity Count | Chemical     | Plant Part | Low PPM | High PPM | StdDev              | Reference Citation   |
|----------------|--------------|------------|---------|----------|---------------------|--|
| 4              | THREONINE    | Leaf       | 2000    | 10730    | 0.3153628468971734  | CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses  |
| 4              | THREONINE    | Seed       | 1050    | 1100     | -1.574239291812439  | Rizk, A.F.M. and Al-Nowaihi, A.S., The Phytochemistry of the Horticultural Plants of Qatar, Scientific and Applied Research Centre, University of Qatar. |
| 3              | TRIACONTANOL | Leaf       | --      | --       |                     | Rizk, A.F.M. and Al-Nowaihi, A.S., The Phytochemistry of the Horticultural Plants of Qatar, Scientific and Applied Research Centre, University of Qatar. |
| 29             | TRYPTOPHAN   | Seed       | 440     | 450      | -0.9805035053762663 | Rizk, A.F.M. and Al-Nowaihi, A.S., The Phytochemistry of the Horticultural Plants of Qatar, Scientific and Applied Research Centre, University of Qatar. |
| 11             | TYRAMINE     | Plant      | --      | --       |                     | Rizk, A.F.M. and Al-Nowaihi, A.S., The Phytochemistry of the Horticultural Plants of Qatar, Scientific and Applied Research Centre, University of Qatar. |
| 8              | TYROSINE     | Leaf       | 2240    | 12010    | 1.1112099488478182  | CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses  |
| 3              | VALINE       | Leaf       | 3120    | 16740    | 1.1346165716482157  | CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses  |
| 3              | VALINE       | Seed       | 1600    | 1650     | -1.2761249121679237 | Rizk, A.F.M. and Al-Nowaihi, A.S., The Phytochemistry of the Horticultural Plants of Qatar, Scientific and Applied Research Centre, University of Qatar. |