CHEMICAL CHARACTERIZATION OF BASIL (*OCIMUM* SPP.) FOUND IN THE MARKETS AND USED IN TRADITIONAL MEDICINE IN BRAZIL.

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Ocimum species are used both in Brazilian traditional medicine against bronchitis, coughs, and sorethroat, and in foods and flavorings. The traditional uses of basil in Brazil are reviewed and fourteen accessions of basil, O. americanum (1), O. basilicum (3), O. campechianum (3), O. gratissimum (5), and O. selloi (2) were collected and brought from Brazil to the USA and grown at Purdue University. Upon flowering, the volatile oils were extracted by hydrodistillation and chemically analyzed by GC/MS. Accessions of O. gratissimum showed high eugenol (40- 66%) and high thymol (31%), as a relative percentage of total volatile oil. Ocimum campechianum accessions showed high 1,8-cineole (62%) and β-caryophyllene (78.7%). Accessions of O. basilicum were found to be rich in 1,8-cineole (22%), linalool (49.7%), methyl chavicol (47%) or methyl (E)-cinnamate (65.5%). An O. americanum var. americanum accession showed high methyl (E)-cinnamate (>90%). Volatile oils of O. basilicum and O. gratissimum naturalized in Brazil reflected the range of chemotypes found in their country of origin. Unusual basils from other Ocimum species were identified that can serve as genetic sources of aroma chemicals for crop improvement.