HERBS AND SPICES PART 1: HERBS

Christopher E. Dahle, BU1269

Herbs and spices are plants or plant parts used to flavor, or enhance the flavor of, meat and vegetable dishes. Bakers also use them to flavor breads and bakery goods, including confectionary items. They are generally a minor part of the diet, but can provide trace elements and vitamins if used in quantity. Some of them are used in traditional medicine. This two-part article does not address these therapeutic properties.

Herbs consist mostly of leaves or sometimes seeds. Herb plants are mostly Temperate in origin, while spice plants are mostly Tropical. Readers will note that the families Apiaceae and Lamiaceae have the largest representation. All these plants have volatile oils, or essential oils, produced in specialized gland cells in leaves and fruit.

Spices are derived from the rhizomes, roots, stems, flowers, fruits, seeds, and bark of plants that have essential oils. Their use in cooking improves the taste of foods. In the past, the spice trade was extremely lucrative because most of the plants were Tropical and had a restricted geographical range.

What follows is a listing of commonly used herbs and spices, divided into two parts, one for herbs, and the other for spices. The list is in alphabetical order by family. Each entry contains a short description of their use and growth characteristics. Not all have appeared on stamps. For those that have, I have chosen the stamps in the list when a single motif is dominant. Occasionally there are two different species on one stamp. Some, like those for celery and rue, are the only examples where the plant appears on a stamp. Others, like Hyssop, feature another subject (e.g., butterfly) as the main motif. This plant has not yet appeared alone on a stamp.

Atriplex hortensis Amaranthaceae Orache

Use: Fresh leaves used as vegetable or culinary herb, seldom used today, but once important. **Growth characteristics:** Annual herb from southeastern Europe and western Asia grows to two meters (m).

Not illustrated

Allium cepa Amaryllidaceae Onion

Use: Bulb used fresh or dried. Can be used in a variety of soups and salads, either raw, cooked, or processed.



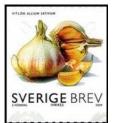
Growth characteristics: Original wild form is unknown, but is probably of Middle Eastern origin. A biennial that is harvested as an annual, it grows best in cool weather.

Albania 2843b (2007); Algeria 904a–b (1989); Bahamas 768 (1993); Brazil 1661 (1982); Bulgaria 1020 (1958); Burkina Faso

(2011); Curaçao 61c (2011) [illus]; Finland 1353b (2010) [illus]; Jordan 2000b (2009); Korea North (1998); Libya 1309m (1986) & 1619o (1998); Mali 657 (1994); Montserrat 170 (1965); New Caledonia C623c (1994); Tunisia 2980 (2005); Turkey 290 (2005); Uganda 136 (1975)

Allium sativum Amaryllidaceae Garlic

Use: Bulb is used fresh, powdered, raw, or cooked. Important in Asian, Middle Eastern, North African, southern European, and Latin American cuisines. Pungent, spicy flavor.



Growth characteristics: Perennial herb to 0.6 meter (m) that probably originated in central Asia. In use for 7000 years.

Albania 2843a (2007); Algeria 904b (1989); Bosnia & Herzegovina 554 (2006); Bulgaria 1041 (1958); Cuba 5005 (2009); Denmark 1447 (2009); Gambia 2411c (2001); Great Britain 1593 (1995); Korea North (1998); Iran 3035e (2011); Libya 1309i (1986) & 1619a (1998);



SUOMI FINLAND

Tunisia 1516 (2011) [illus]; Turkey 2979 (2005); Sweden 2624d (2009) [illus]

Allium schoenoprasum



Amaryllidaceae Chives

Use: Fresh leaves give milder flavoring than other *Allium* species. Also used as a garnish. Found in French *fines herbes*.

Growth characteristics: Perennial herb 30–50cm. Native to Europe, Asia, and North America.

Sweden 2507c (2005); Sweden 2623 (2009) [illus]

Allium tuberosum Amaryllidaceae Chinese chive, Garlic chive

Use: As herb and as vegetable in Chinese, Japanese, and Korean cooking. More like garlic than chives.

Growth characteristics: Perennial from East Asia and India.

Not illustrated

Anethum graveolens Apiaceae Dill

Use: Fresh or dried leaves used as herbs in Germany, Poland, Scandinavia, and Russia. Most used herb for fish. Used in Indian cooking in *dal* and rice dishes. "Dill seed" used as spice in Arab countries to make *fattoush* and pickles.

Growth characteristics: Probably native to southern Europe and Southwest Asia.

Sweden 2622 (2009) [illus]



Angelica archangelica Apiaceae Angelica



Use: Candied stalks flavor confectionaries. Stems, stalks, and fruits used in salads. Flavoring for gin, Chartreuse, Benedictine, *Vespétro*, and vermouth.

Growth characteristics: Biennial herb native to Europe and Asia. Grows wild in Scandinavia, cultivated other places. Grows to 2m tall.

Finland (Åland) 257 (2007) [illus]; Great Britain (Jersey) 1229 (2006); Greenland 431 (2004) [illus]; Sweden 743 & 758 (1967), 1490 (1984) [illus], 2512d (2005)





Anthriscus cerefolium Apiaceae Chervil

Use: Fresh or dried leaves, used as garnish. Used to season poultry and fish. Similar to parsley, but with an anise flavor. Used in *fines herbes* in French cooking. Also in *béarnaise* sauce.

Growth characteristics: Annual herb indigenous to central Asia.

Not illustrated

Apium graveolens Apiaceae Celery

Use: Stalks, leaves, and fruits (celery seed). Dried leaves used as an herb.

Growth characteristics: Biennial herb of Eurasian origin.

Libya 1309l (1986)

Carum carvi Apiaceae Caraway

Use: Used in stews, sauerkraut, cheeses, breads, and cakes. In alcoholic beverages aquavit, kummel, schnapps, and *Vespétro* liqueur.

Growth characteristics: Biennial herb indigenous to central Europe and Mediterranean.

Yugoslavia 694 (1963); Germany B542 (1977) [illus]



Coriandrum sativum



Coriander; Cilantro or Chinese Parsley



Use: Dried fruits used as coriander, fresh leaves as cilantro. Found in Asian, Indian, Middle Eastern, Mexican Latin American, and Scandinavian cooking. Coriander is an

ingredient in curry powder and *garam masala*. Also used to season meats, vegetables, and soups. Used in baked goods and liqueurs.

Growth characteristics: Annual herb with Eastern Mediterranean origins.

Mauritius 800 (1995); India 2321e (2009); Israel 1657 (2006) [illus]; Malaysia 1350g-h (2011) [illus]; Singapore 1500 (2011) [illus]





Cuminum cyminum

Apiaceae

Cumin

Use: Fruits (usually called "seeds") ground or whole. In South Asian, North African, and Latin American cuisines. Used in breads and cheeses, soups and stews. Component of *garam masala* and curry powder.

Growth characteristics: Small annual herb that requires long periods of hot temperatures (>30°C). Indigenous to Mediterranean region.

Ethiopia 1147 (1986) [illus]



Ferula assa-foetida

Foeniculum vulgare

Apiaceae Assafoetida

Use: Gum is harvested from cuts made on the stems. Used in Indian cooking with turmeric, especially in *dal*. Used in Worcestershire sauce. Has a strong unpleasant odor.

Growth characteristics: Perennial herb to 2m native to Iran and Afghanistan.

Apiaceae

Not illustrated



Use: Leaves, stems, fruits are used. Seeds have anise-like flavor. Leaves are similar to dill. Seeds used in South Asian and Middle Eastern cooking. Florence fennel used as vegetable in German and Italian salads.

Growth characteristics: Perennial herb grows to 1.5m. Indigenous to the Mediterranean region, but found growing worldwide.



Malaysia 1350a-b (2011) [illus]; Pakistan 791 (1993); Palestinian Authority 82 (1998); Tunisia 1382 (2005) [illus]





Levisticum officinale

Apiaceae

Lovage

Use: Seeds used similar to fennel. Leaves used to flavor soups and stews in European cuisine

Growth characteristics: Native to eastern Mediterranean, possibly central Asia.

Myrrhis odorata Apiaceae Sweet Cicely

Use: Leaves and fruit used raw or cooked in Germany and Scandinavia.

Growth characteristics: Perennial to 1m native to Europe.

Monaco 1430 (1984) [illus]



Petroselinum crispum Apiaceae Parsley

Use: Leaves used fresh or dried to flavor or garnish soups, stews, salads in European, Middle Eastern, and American cooking.

Growth characteristics: Small biennial herb from Southern Europe and the Mediterranean.

Not illustrated

Pimpinella anisum Apiaceae Anise



Use: Dried ripe fruit (often called "seeds") used whole or ground in confectionaries and liquors (e.g., arak, ouzo, raki, anisette, absinthe).

Growth characteristics: Annual herbaceous plant grows to 0.5m. Do not confuse with Star Anise, *Illicium verum*, (completely unrelated). Design error in Montserrat Sc#1262a and Singapore Sc#1501 shows star anise seedpods with flowers and vegetative parts of *P. anisum*.





Artemisia dracunculus Asteraceae Tarragon

Use: Fresh or dried leaves used to season fish, chicken, and egg dishes. Used in *fines herbes* and *béarnaise* sauce of French cuisine.

Growth characteristics: Perennial herb indigenous to Europe and central Asia. Grows to 0.6m

Not illustrated

Borago officinalis Boraginaceae Borage

Use: As fresh vegetable or dried herb in salads or as garnish. Seeds are used for their oil.



Growth characteristics: Annual herbaceous plant 0.5–1m tall. Native to southern Europe and Mediterranean.

Algeria 1328 (2005) [illus]; Malta 1064 (2001); Paraguay 2620 (1999); Romania 5328 (2012) [illus]



Armoracia rusticana Brassicaceae Horseradish

Use: Fresh or dried roots mixed with vinegar and used as condiment for meat dishes in Europe and Scandinavia. Pungent taste irritates mucus membranes. Used in ancient Egypt and Greece.

Growth characteristics: Perennial herb with large taproot. Grows to 1.5m. Originated in southeastern Europe. Not illustrated

Brassica juncea juncea Brassicaceae Brown Mustard, Dijon Mustard

Use: Ripe seeds used to make a paste used as a condiment, especially popular in France. African and Asian cooking uses leaves as vegetable.

Growth characteristics: A hybrid from the Himalayas.

Brassica nigra Brassicaceae Mustard

Use: Ripe seeds crushed to make paste with water or vinegar.

Growth characteristics: Annual herb originated in the Middle East. One parent of *B. juncea*. Grows 0.6–1.2m.

Not illustrated

Eruca sativa Brassicaceae Rocket, Arugula

Use: Fresh leaves used in salads. Used as garnish for soups.

Growth characteristics: Annual herbaceous plant up to 0.8m originally from

Mediterranean region.

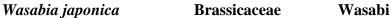
Not illustrated

Sinapis alba Brassicaceae White mustard

Use: Ripe seeds crushed mixed with water or wine or roasted whole. Pungent taste.

Growth characteristics: Probably eastern Mediterranean origin.

Ethiopia 1146 (1986) [illus]



Use: Roots and stem grated or powdered, used as condiment with sushi and sashimi. Hot flavor more like mustard

than chili peppers.

Growth characteristics: Perennial herb from Japan.

Not illustrated

Capparis spinosa



Capparidaceae Caper

Use: Unopened flower buds pickled and used as a condiment for fish and meat dishes. Add mustard-like pungency and saltiness

Growth characteristics: Small shrub found wild in southern Europe and cultivated in Mediterranean countries.

Algeria 847 (1986); Bahrain 412c (1993) & 590g (2003); Cyprus 992 (2002); Jordan 580 (1970) & 2045 (2011) [illus];

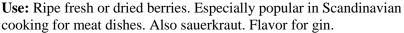
Libya 636 (1976), 783 (1979), & 1052e (1983); Morocco 117 (1965); Nauru 53 (1963) & 64 (1966); Qatar 756 (1991); Serbia & Montenegro 278a (2005) [illus]; Turkish Republic Northern Cyprus 673 (2009)



Juniperus communis



Juniper



Growth characteristics: Evergreen shrub or tree to 6m indigenous to north temperate regions.

Finland B185 (1969); Faroe Is. 564 (2011) [illus]; Liechtenstein 354 (1960); Slovenia 327a (1998); Sweden 2162 (1996) & 2583a–b (2008) [illus]; Tunisia 507 (1968); Yugoslavia 543 (1959)







Trigonella foenum-graecum Fabaceae **Fenugreek**

Use: Ripe seeds whole or powdered and used in curry. Also in Persian and Ethiopian cooking.

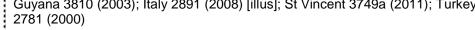
Growth characteristics: Annual herb up to 0.8m from southern Europe and western Asia. Jordan 2051 (2011) [illus]





Use: Stigmas and style from flowers, dried and used to color and flavor cheese, butter, pastries. Used in bouillabaisse and paella. Extensive use in Indian, Turkish, and Persian cuisine. Growth characteristics: Small perennial that re-grows from a bulb, native to southern Europe.

Guyana 3810 (2003); Italy 2891 (2008) [illus]; St Vincent 3749a (2011); Turkey



Lavandula angustifolia Lamiaceae Lavender



Use: Dried flower buds used as condiment and to flavor cheeses. Leaves can substitute for rosemary.

Growth characteristics: Small shrub 1–2m native to western Mediterranean.

Japan Z736 (2006), Z774 (2007); Oman 457I (2004); Tunisia 1384 (2005) [illus]; United Arab Emirates 625 (1998); USA 4508 & 4516 (2011) [illus]



Hyssopus officinalis Lamiaceae Hvssop

Use: Fresh or dried leaves used in salads, soups, meat dishes. Flavor of licorice and mint.

Growth characteristics: Perennial to 0.6m, native to southern Europe.

Yugoslavia 599 (1961) [illus]

Lemon Balm Melissa officinalis Lamiaceae

Use: Fresh or dried leaves used in eggs, stews, chicken, and fish dishes. Imparts lemon flavor.

Growth characteristics: Perennial herb to 0.5m from eastern Mediterranean, Asia Minor.

Not illustrated

Mentha arvensis Lamiaceae **Field Mint**

Use: Fresh leaves used in Thai, Malaysian, Japanese, and Indian cooking. Used raw or cooked, fresh or dried, flavors sweets and beverages.

Growth characteristics: Native in temperate regions, with creeping stems, 0.2–0.8m tall.

Not illustrated

Lamiaceae **Peppermint** Mentha x piperita



Use: Fresh or dried leaves used to flavor confectionary items and

Growth characteristics: Perennial herb, hybrid of *Mentha spicata* and M. aquatica.

Bulgaria 838 (1953); Croatia 557 (2004); DDR 496 (1960); Israel

1659 (2006) [illus]; Malaysia 1394 (2011) [illus]; Poland 2413 (1980); Romania 1299 (1959); Yemen (1965); Yugoslavia 776 (1965)





Mentha spicata Lamiaceae Spearmint

Use: Leaves used fresh, dried or frozen for flavoring confectionary items. Used with lamb in English cooking. **Growth characteristics:** Perennial herb, native to Europe and Asia, grows 0.3–1m.

Not illustrated

Ocimum basilicum Lamiaceae Basil



Use: Strongly linked to Italian cuisine in soups and sauces. Also used in Southeast Asian cooking in vegetable and meat dishes. **Growth characteristics:** Probably native to India, grows 0.3–0.5m.

Cyprus 993 (2002); Ethiopia 1145 (1986); Fr. Polynesia 451 (1986); Jordan 2048 (2011) [illus]; Netherlands Antilles 1200 (2008); Sweden 2624a (2009) [illus]



Use: Fresh leaves used for meat, poultry, salads, fish, especially in European cooking. **Growth characteristics:** Perennial herb from Asia Minor, grows to 0.5m.

St Vincent 830 (1985); Tunisia 1385 (2005) [illus]

Origanum vulgare Lamiaceae Oregano

Use: Fresh or dried leaves used in tomato dishes, especially pizza, and other meat dishes of a variety of cuisines.

Growth characteristics: Native to Europe and central Asia, grows as a perennial to 0.5m.

Liechtenstein 1009 (1993); USA 4505 & 4513 (2011) [illus]

Perilla frutescens Lamiaceae Perilla, Shiso

Use: Fresh or pickled leaves used in Japanese sashimi, Chinese, Korean, and Southeast Asian cooking. **Growth characteristics:** Annual herb, green or purple, indigenous to eastern Asia.

Not illustrated

Plectranthus amboinicus Lamiaceae Indian borage

Use: Fresh leaves flavor meat dishes in Indonesia and Malaysia. Can substitute for oregano. **Growth characteristics:** Perennial that grows to 0.7m. Indigenous to southeastern Africa.

Not illustrated

Rosmarinus officinalis Lamiaceae Rosemary

Use: Fresh or dried leaves season meat, game, pork, sausage, poultry, stews, sauces, soups, and salads. Bitter, astringent taste.



Growth characteristics: Evergreen shrub, indigenous to the Mediterranean and Caucasus regions.

Gambia 2410e (2001); Montserrat 1262e (2011); Sweden 2507b (2005) & 2624c (2009) [illus]; Tunisia 1519 (2011) [illus]









Salvia officinalis



Lamiaceae Sage

Use: Fresh or dried leaves. Component of Italian and Balkan cooking. Used to season meat dishes, poultry, fish, and vegetables. In America and Britain, used for sage and onion stuffing for turkey or chicken.

Growth characteristics: Native to southern Europe and Mediterranean. Perennial shrub to 0.6m.

Greece, Mt. Athos 63 (2010); Jordan 2049 (2011) [illus]; Montenegro 242 (2010); Poland 2415 (1980); USA 4509 & 4517 (2011) [illus]



Satureja hortensis Lamiaceae Summer Savory

Use: Fresh or dried stem tips with leaves used to flavor meats and stews and bean dishes.

Growth characteristics: Annual herbaceous plant grows to 0.6m, native to southeastern Europe

Not illustrated

Thymus vulgaris Lamiaceae Thyme

Use: Fresh or dried leaves used for soups and stuffing, meat, poultry and fish dishes. Used in a *bouquet garni* with other herbs.

Growth characteristics: Originated in Mediterranean and southeast Italy. Perennial low-growing shrub.

France 3648 (2009) [illus]; Palestinian Authority 56 (1996)



Laurus nobilis Lauraceae Bay

Use: Fresh or dried leaves used in soups, stews, poultry, and meat dishes in European cuisines. Often used in a *bouquet garni*.

Growth characteristics: Shrub or small tree native to the Mediterranean.

Algeria 1270 (2002); Dominica 466 (1975); Gambia 2407 (2001); Greece 1217 (1977); Greece, Mt Athos 52 (2010) [illus]; Grenada Grenadines 2487 (2003); Israel 1700 (2007); Oman 367m (1994); Russia 4648, 4654, 4660 (1978); UN 373 (1982); Yugoslavia 858 (1967) & 1544 (1981)



Myrtus communis



Myrtaceae Myrtle

Use: Leaves and berries used in Sardinian and Corsican cuisine for meat dishes.

Growth characteristics: Evergreen shrub to 2–3m native to Mediterranean.

Cyprus 990 (2002); Greece 1886 (1989); Grenada-Grenadines 1840c (1996); Israel 204 (1961); Malta 1106 (2003); Tunisia 1321b & 1327 (2003) [illus]; Turkey 2804 (2004)



Syzygium polyanthum Myrtaceae Salam Leaf, Daun Salam, Indonesian Bay Leaf

Use: Fresh or dried leaves used to season meat dishes in Indonesian cooking.

Growth characteristics: Evergreen tree native to south Asia.

Pandanus amaryllifolius Pandanaceae Pandan

Use: Fresh or dried leaves used in Thai, Malay, and Indonesian cooking.

Growth characteristics: Large shrub that may have originated as an ancient cultivar.

Not illustrated

Cymbopogon citratus



Poaceae Lemon Grass

Use: Fleshy leaf bases used in Asian cuisines to season poultry, seafood, fish, and beef.

Growth characteristics: Perennial native to southern India and Sri Lanka

Angola 1263 (2004) [illus]; Comoro Islands 987 & 990 (2007) [illus]; Dominican Republic 1289c (1998); Montserrat 1262b (2011); St Thomas & Prince 714 (1983)



Persicaria odorata Polygonaceae Vietnamese Mint, Laksa Leaf, Rau Ram

Use: Fresh leaves used as garnish in Singapore and Malaysian seafood soup known as *laksa*. Also used in salads in Thai and Vietnamese cooking.

Growth characteristics: Perennial native to Southeast Asia.

Not illustrated

Rumex acetosa

Polygonaceae Sorrel

Use: Fresh leaves used in French cuisine. Used like spinach in many cultures.

Growth characteristics: Indigenous to Europe and northern Asia. Perennial herb to 0.6m.

Not illustrated

Portulaca oleracea

Portulacaceae 1

Purslane

Use: Fresh leaves used as garnish or eaten like spinach. **Growth characteristics:** Cosmopolitan weed up to 0.4m.

China (Taiwan) 3163 (1998) [illus]; Surinam 1003 (1995)



Nigella sativa

Ranunculaceae Black Cumin

Use: Ripe seeds used as condiment or pepper substitute in Indian and Middle Eastern cooking.

Growth characteristics: Annual herbaceous plant to 0.4m, native to southern Europe, northern Africa, and western Asia.

Not illustrated

Rhamnus prinoides

Rhamnaceae

Geisho

Use: Flavors locally brewed beer.

Growth characteristics: Native to Sub-Saharan Africa, cultivated in Ethiopia. Small

tree to 6m.

Ethiopia 1678-81 (2004) [illus]



Sanguisorba minor Rosaceae Salad Burnet

Use: Fresh leaves used in soups and marinades. Reminiscent of cucumber.

Growth characteristics: Perennial herb from central and southern Europe grows to 0.6m.

Murraya koenigii **Curry Leaf** Rutaceae

Use: Fresh or dried leaves used especially in southern Indian cooking, also in Malaysia and Indonesia cuisines.

Growth characteristics: Evergreen tree grows 3-6m, native to India and Sri Lanka.

St. Vincent 3749c (2011) [illus]



Ruta graveolens Rutaceae Rue, Herb-of-Grace

Use: Fresh leaves, used sparingly because of bitter and pungent taste, to flavor sausage and marinades. Used in Ethiopia, Greece, and other Mediterranean countries, In Italy to flavor brandy called grappa alla ruta.

Growth characteristics: Indigenous to southern Europe. Perennial shrub

Gibraltar 946 (2003) [illus]



Zanthoxylum piperitum Rutaceae Sichuan pepper

Use: Ripe capsule and seeds used in Sichuan dishes in Chinese cuisine. Growth characteristics: Small deciduous tree grows to 4m, native to East Asia

Not illustrated

Kaffir lime Citrus hystrix Rutaceae

Use: Rind used in Lao and Thai cooking for aroma and astringency. Leaves used in Vietnamese and Indonesian dishes to give lemon flavor.

Growth characteristics: Small thorny tree, 3–6m native to Southeast Asia.

France (Mayotte) 254d (2009); Malaysia 1395 (2012) [illus]



Capsicum annuum

Solanaceae Sweet Pepper, Paprika, Chili Pepper



Use: Green or mature fruit eaten cooked or raw, chopped into salads and vegetable dishes. Important in many countries. Growth characteristics: Indigenous to Central and South America, grows to 1m. Annual herb that includes bell peppers and jalapeños. Fruit color varies from yellow and orange to red.











Capsicum frutescens

Solanaceae Chili Pepper

Use: Fresh or dried fruit used for its hot spicy flavor. Vary from mild to extremely hot "habañero."



Growth characteristics: Perennial herbaceous plant originally from Central and South America. Ripe fruit can be pale yellow to bright red.

Bulgaria 1022 (1958); Libya 1309g (1986); Jordan 200h (2009) [illus]; Montserrat 162 (1964); St Vincent 829 (1985); Tanzania 2522f (2008) [illus]



Tropaeolum majus

Tropeolaceae Nasturtium, Indian Cress



Use: Flowers and buds, leaves, seeds and tubers. Pickled seeds substitute for capers. Leaves give tangy flavor to salads.

Growth characteristics: Native to Peru and Bolivia. Creeper with fleshy stems.

Austria 719 (1964); Czech Republic 3346 (2007) [illus]; Peru 880 (1986) & 919 (1987); Poland 1435 (1966) & 2056 (1974); Switzerland B290 (1959); Tanzania 2025c (1999); Ukraine 606 (2005) [illus]



References:

http://en.wikipedia.org/wiki/Spice

http://en.wikipedia.org/wiki/List_of_culinary_herbs_and_spices

http://www.ors.od.nih.gov/pes/dats/food/balance/Documents/herbs-spices.pdf

http://www.kew.org/plants-fungi/plants-fungi-A-Z/index.htm

Van Wyk, B-E. 2005. Food Plants of the World: An Illustrated Guide. Timber Press, Portland, OR 97204. 480pp.

ELEPHANT CACTUS: BOLIVIA

On 9 July 2013, Bolivia issued a set of four stamps depicting indigenous flora in danger of extinction. The 3-boliviano value shows a stand of *Pachycereus pringlei*, also known as Elephant Cactus. This species originated in Baja California, but it grows also in the Andean ranges of Bolivia, Peru, Chile, and Argentina. It is the largest cactus in the world. People often mistake it for the saguaro cactus, which only grows farther north.

This cactus can grow to a height of 60 feet and weigh up to 25 tons. Many specimens reach the age of well over 300 years. Due to its symbiotic relationship with bacterial and fungal colonies on its roots, it can grow on bare rock where no soil exists at all.

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BS. 3.00

The cactus is endangered by loss of habitat due to land clearing for cultivation.

Answer to the riddle on the cover: **Basil** and **Lavender** take **Thyme** to give **Sage** advice to **Rosemary**.