

# 2017 AHS SEED EXCHANGE CATALOG

The following seeds were donated by AHS members, organizations, and seed companies from all over the country. The description supplied for each plant combines published information about the species with details supplied by the donors. Remember, named cultivars do not always come true from seed, so you may observe some variation among seedlings. Unless otherwise stated, plants grown from these seeds will grow best in full sun and well-drained, moderately fertile soil.

Conditioning cycles (also known as stratification) should be two months unless otherwise stated. Warm conditioning, where recommended, should be done at about 70° Fahrenheit (F); cold conditioning at 40°F. A “warm soil” is one that has reached a temperature of at least 65°F. U.S. Department of Agriculture (USDA) Plant-Hardiness and AHS Plant Heat Zone ratings tend to be conservative; plants may grow outside the ranges indicated. A USDA zone rating of 0-0 means that the plant is a true annual; it completes its life cycle and dies in a year or less. Germination times will vary depending on the temperature at which seeds are sown and the age of the seeds. Where exposing seeds to a conditioning cycle is recommended, the germination time given is after completion of the conditioning period.

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## ANNUALS & BIENNIALS

**1 *Alcea rosea* ‘Mars Magic’.** Hollyhock cultivar. Height 6–8 feet. Spread 1–2 feet. A vigorous, upright biennial or short-lived perennial. This selection is a mixture of red and some pink flowers. Vigorous, upright biennial with shallowly lobed, alternate leaves. Looks best placed at the back of a border, against a wall, or by a fence. Full sun. Deadhead to encourage reblooming. May require staking. Indoors, sow 6–8 weeks before last frost and transplant out after last frost. Outdoors sow in mid-spring barely covering the seeds. Germinates best in cool temperatures (55–60°F). Germinates in 7–14 days. Mediterranean. Zones 3–9, 10–3.

**2 *Alcea rosea* ‘Summer Carnival’.** Hollyhock cultivar. Height: 4–5 feet. Spread: 1–2 feet. Double blossoms in a variety of colors from midsummer to fall. Vigorous, upright biennial with shallowly lobed, alternate leaves. Looks best placed at the back of a border, against a wall, or by a fence. Full sun. Deadhead to encourage reblooming. May require staking. Indoors, sow 6–8 weeks before last frost and transplant out after last frost. Outdoors sow in mid-spring bare-

ly covering the seeds. Germinates best in cool temperatures (55–60°F). Germinates in 7–14 days. Mediterranean. Zones 3–9, 10–3.

**3 *Cleome hassleriana*.** Spider flower, cleome. Height: 4–6 feet. Spread: up to 2 feet. Erect, multi-branched plant with palmate leaves and hair-covered stems. Strongly scented mixed color flowers bloom in airy terminal clusters from summer to frost. Tolerates part sun. Self-sows. Sow indoors 6 weeks before last frost or broadcast outdoors after last frost. Germinates in 7–14 days. South America. Zones 11, 12–1.

**4 *Consolida ajacis* (syn. *Delphinium ajacis*).** Larkspur mix. Height: 1–4 feet. Spread: 1–1½ feet. Dense clusters of blue, pink, and white flowers bloom in early summer along upright stems above fernlike leaves. Prefers cool conditions; afternoon shade in warm regions. May need staking. **Caution: All parts of the plant are poisonous.** Sow indoors 6–8 weeks prior to last frost or directly in the garden after last frost. Germinates in 7–21 days. Mediterranean. Zones 0–0, 9–1.

**5 *Cosmos bipinnatus*.** Cosmos mix. Height: 4–5 feet. Spread: 1–2 feet. Erect annual with lacy

## Donation Levels

Current AHS members can order up to 5 packets of seeds free of charge, but we do suggest a \$5 voluntary contribution to help defray postage and handling costs.

Donors at the **\$10 level** can select up to 10 packets of seeds and also receive a free copy of the **2017 AHS RECIPROCAL ADMISSIONS PROGRAM (RAP) GUIDE**, which details the benefits AHS members receive at 300 public gardens around the country.

For a **\$20 donation**, you can select up to 20 seed packets and receive a copy of the 2017 RAP Guide.

## TO ORDER SEEDS

Place your order online at [www.ahsgardening.org/seeds](http://www.ahsgardening.org/seeds) or download a printable order form to mail in. The deadline for ordering seeds is **March 4, 2017**. Members who donated to the 2017 seed exchange have first choice of seeds, but we must receive these orders postmarked by **February 18, 2017**.

foliage that produces daisylike double, semi-double, and fluted flowers in shades of white, pink, and magenta with yellow centers throughout summer. Early pinching produces fuller, stronger plants. Deadhead to prolong flowering. Drought tolerant. Attracts bees and butterflies. Self-sows. Sow outdoors in late spring once soil has warmed. Germinates in 7–14 days. Central America. Zones 0–0, 12–1.

**6 *Cosmos bipinnatus* ‘Bright Lights’.** Cosmos cultivar. Height: 1–2 feet. Spread: 1 foot. Shorter than other cosmos, its daisylike flowers come in hot shades of orange, and yellow. Deadhead to prolong flowering throughout summer. Drought tolerant. Attracts bees and butterflies. Self-sows. Sow outdoors in late spring once soil has warmed. Germinates in 7–14 days. Central America. Zones 0–0, 12–1.

**7 *Cosmos bipinnatus* 'Dazzler'.** Cosmos cultivar. Height: 4 feet. Spread: 1½ feet. Copious, vibrant, single red flowers with yellow centers sway over foliage throughout the summer. Early pinching produces fuller, stronger plants. Deadhead to prolong flowering. Drought tolerant. Attracts bees and butterflies. Self-sows. Sow outdoors in late spring once soil has warmed. Germinates in 7–14 days. Central America. Zones 0–0, 12–1.

**8 *Cosmos sulphureus*.** Orange cosmos. Height: 4–5 feet. Spread: 1–2 feet. Upright plant with showy, daisylike flowers above finely lobed foliage. Open, bowl-shaped, orange or yellowish-red flowers bloom throughout summer. Deadhead to prolong flowering. Tolerates dry, porous soils and is very heat tolerant. Sow outdoors in late spring. Germinates in 7–14 days. Central America. Zones 0–0, 12–1.

**9 *Digitalis purpurea*.** Common foxglove. Height: 3–5 feet. Spread: 2–3 feet. Biennial or tender perennial with erect stems that are densely covered with lance-shaped leaves. Showy, tube-shaped, terminal flowers in mix of colors bloom from June to July. Tolerates part sun in warmer regions. Self-sows. Sow outdoors, uncovered, in fall or spring. If sown in early fall, it should flower the following summer; if sown in late winter to early spring it may take two years to bloom. Germinates in 14–21 days. **Caution: All parts of the plant are poisonous.** Central Europe. Zones 4–8, 9–1.

**10 *Eschscholzia californica* 'Mission Bells'.** California poppy cultivar. Height 1–1½ feet. Spread: 1 foot. This annual or short-lived perennial has finely divided blue-green foliage and poppylike flowers in mixed colors that bloom in spring and again in fall into winter. Flowers fully open in the sun, and will close during cloudy days or if shaded. Drought-tolerant. Grows best in free draining sandy or loamy soil. Self-sows. Indoors, sow in late winter. Outdoors, sow after last frost; in mild-winter regions, sow in late summer or fall. Germinates in 7–14 days. Oregon to coastal California. Zones 7–9, 10–1.

**11 *Lavatera trimestris*.** Annual mallow. Height: 2–4 feet. Spread: 2–3 feet. Fast-growing, upright annual with shallowly lobed, mid to dark green leaves with heart-shaped bases. Four-inch-wide, hibiscuslike, pink or white flowers bloom in summer. Good for cut flowers. Full sun. Sow outdoors in late spring. Germinates in 15–20 days. Mediterranean. Zones 0–0, 12–1.

**12 *Lunaria annua*.** Money plant, silver dollar,

honesty. Height: 2–3 feet. Spread: 1 foot. Hardy biennial with heart-shaped, coarsely toothed leaves bears cross-shaped, rosy pink, white, or purple flowers on tall terminal spikes in late spring to early summer. The coin-shaped, papery fruit—technically a silique—is used in dried arrangements. Tolerates part sun. Self-sows. Outdoors, sow two weeks before last-frost date. Germinates in 3–10 days. Central and Southern Europe. Zones 3–9, 9–1.

**13 *Mirabilis jalapa*.** Four o'clocks. Height: 2–3 feet. Spread: 2 feet. Interesting fragrant, tubular flowers come in a mix of colors. Fast-growing, bushy, tender perennial grown as an annual will bloom from early to late summer. Flowers open in late afternoon and wither by morning. Indoors, sow in early spring. Sow indoors in early spring, or outdoors after last frost. Germinates in 7–14 days. Tropical Americas. Zones 10–11, 12–1.

**14 *Nicotiana sylvestris*.** White flowering tobacco, woodland tobacco. Height: 3–5 feet. Spread: 1–2 feet. Plant first forms a bold, basal rosette of bright green, sticky leaves up to 2 feet long and then a thick central stalk is topped in midsummer by long, tubular, fragrant white flowers. Tolerates part shade. Self-sows. Sow outdoors in mid-spring. Germinates in 7–21 days. **Caution: All parts of the plant are poisonous.** Argentina. Zones 10–11, 12–1.

**15 *Orlaya grandiflora*.** White laceflower. Height: 1–3 feet. Spread: 1–2 feet. A bushy annual with fernlike, bright green foliage. Lacy umbels of pure white flowers bloom above the foliage from midsummer to fall. Attracts pollinators. Self-sows. Cold condition indoors or sow directly outdoors after last frost. Do not cover seeds. Germinates in 7–14 days. Europe. Zones 0–0, 9–1.

**16 *Papaver somniferum*.** Bread seed poppy. Height: 3–4 feet. Spread: 1 foot. Short-lived perennial, commonly grown as an annual, with gray-green, serrated leaves. The purple flowers, borne on erect stems, bloom in early to midsummer. Flowers are followed by large, gray-brown seedpods. Self-sows. Sow outdoors, uncovered, just before last-frost date. Germinates in 7–14 days. **Caution: All parts of the plant are poisonous.** Eurasia. Zones 3–8, 8–1.

**17 *Ricinus communis* 'New Zealand Purple'.** Castor bean cultivar. Height: 6–10 feet. Spread: 3 feet. A large shrub or tree in its tropical habitat, this plant is usually grown as an annual in North America. This cultivar has large, multi-lobed,

dark purple leaves on stout purple stems. Small greenish-yellow flowers bloom in 6-inch spikes in summer, followed by globular red seedpods covered in soft spines. May need staking. **Caution: All parts of the plant are highly poisonous, particularly the beanlike seeds.** Soak seeds in water for 24 hours before sowing outdoors in late spring after last frost. Germinates in 14–21 days. Invasive in California, Texas, and Florida. North-east Africa to western Asia. Zones 10–11, 12–1.

**18 *Viola ×wittrockiana* Swiss Giants Mix.** Pansy cultivar mix. Height: 6–9 inches. Spread: 9–12 inches. Short-lived cool-season perennial usually grown as an annual. Velvety flowers in a wide variety of colors appear from April to June. Tolerates part shade in warm climates. In cold-winter regions, sow seeds, barely covered, indoors in late fall, then place seedlings in a cold frame until early spring; in mild-winter regions, sow seeds in early fall for winter planting. Germinates in 7–14 days. Garden origin. Zones 7–10, 9–1.

**19 *Zinnia elegans*.** Zinnia mix. Height: 3–4 feet. Spread: 1–2 feet. Upright, bushy annual with lance-shaped leaves. This mix produces solid colored, daisylike flowerheads up to 4 inches across on long stems all summer. Sow indoors, barely covered, 4–6 weeks before last frost, or outdoors after soil has warmed. Germinates in 7–14 days. Mexico, South America. Zones 0–0, 12–1.

**20 *Zinnia elegans* 'Apricot Blush'.** Zinnia cultivar. Height: 3–4 feet. Spread: 1–2 feet. This cultivar has double blooms in soft apricot to rose hues. Sow indoors, barely covered, 4–6 weeks before last frost, or outdoors after soil has warmed. Germinates in 7–14 days. weeks. Mexico, South America. Zones 0–0, 12–1.

**21 *Zinnia elegans* 'Lilliput'.** Zinnia cultivar. Height: to 2 feet. Spread: 1 foot. This compact cultivar bears 1½-inch-wide double flowers in a variety of bright colors. Sow indoors, barely covered, 4–6 weeks before last frost, or outdoors after soil has warmed. Germinates in 7–14 days. Mexico, South America. Zones 0–0, 12–1.

**22 *Zinnia pauciflora*.** Small-flowered zinnia. Height: 2–3 feet. Spread: up to 2 feet. This annual has upright stems with lancelike, opposite leaves and inch-wide, single red flowers that bloom all summer. Sow indoors, barely covered, 4–6 weeks before last frost, or outdoors after soil has warmed. Germinates in 7–14 days. Mexico, South America. Zones 0–0, 12–1.

## PERENNIALS & GRASSES

**23 *Agastache foeniculum*** (syn. *A. anethiodora*). Anise hyssop, lavender hyssop. Height: 3–5 feet. Spread: 1½–3 feet. Erect, clumping plant bears spikes of tubular pinkish-blue and white flowers in late summer to fall. Its anise scented leaves are green above and downy white below. The leaves can be used in teas and the flowers are edible. Attracts hummingbirds and butterflies. Tolerates part shade and dry to moist soils. Cold condition seeds, uncovered, or sow outdoors in fall. Germinates in 3–8 weeks. Canada and northern U.S. Zones 4–11, 12–5.

**24 *Aquilegia* spp.** Columbine. Height: 1–3 feet. Spread: 1–2 feet. Clump-forming perennial produces delicate, fernlike, blue-green compound leaves. Bell-shaped flowers in a mixture of colors with spreading sepals and short, hooked spurs bloom in late spring to early summer. Tolerates part shade, especially in warm regions. Self-sows. Cold condition seeds before germinating at 70°F or sow outdoors in fall; do not cover seeds. Germinates in 1–4 weeks. Northern Hemisphere. Zones 3–9, 9–4.

**25 *Asclepias syriaca*.** Common milkweed. Height: 3–6 feet. Spread: indefinite. Erect plant with narrow, downy leaves up to 12 inches long. Flowers, which range from pink to purple and are slightly honey scented, bloom in late summer in leaf axils. Good for naturalizing or attracting butterflies; a host plant for monarch butterflies. Spreads by tuberous roots and can become weedy in gardens. Cold condition or sow seeds outdoors in fall. Germinates in 1–3 months. Eastern North America. Zones 3–9, 9–2.

**26 *Baptisia australis*.** False indigo. Height: 3–5 feet. Spread: 2–4 feet. A shrubby, clump-forming perennial with attractive blue-green foliage and dark blue, pea-like flowers that bloom in long, upright racemes in midsummer. Decorative black seed pods form in late summer. Drought tolerant. Sow outdoors in late fall or in a cold frame in early winter. Germinates in 7–35 days. Eastern U.S. Zones 3–9, 9–1.

**27 *Belamcanda chinensis*** (syn. *Iris domestica*). Blackberry lily. Height: 1–3 feet. Spread: 1–2 feet. Semi-erect, sword-shaped leaves form a fan, over which orange-red, spotted flowers to 2 inches across bloom in midsummer. Flowers are followed by fruit capsules that split to expose shiny black seeds. Sow outdoors in early spring. Germinates in 14–60 days. India, Asia. Zones 5–9, 9–5.

**28 *Chasmanthium latifolium*.** River oats, woodland oats. Height: 3 feet. Spread: 1–3 feet. Loosely tufted, clump-forming grass develops arching leaf blades that turn gold in winter. Dangling, light green, oatlike flower spikelets form in midsummer on slender stems then turn bronze at maturity. Tolerates part shade and moist soils. Self-sows. Sow outdoors in fall or early spring. Germinates in 7–14 days. Eastern North America. Zones 5–9, 9–5.

**29 *Chrysopsis mariana*.** Maryland golden aster. Height: 1–2 feet. Spread: 1–2 feet. A low growing, tidy rosette of basal leaves produces showy, bright clusters of inch-wide, yellow daisylike flowers from late July to October. Tolerates part shade. Cold condition seeds or sow outdoors in fall, uncovered. Germinates in 7–21 days. Southeastern U.S. Zones 5–9, 9–5.

**30 *Echinacea purpurea*.** Purple coneflower. Height: 3–4 feet. Spread: 1½ feet. Erect perennial with hairy stems, hairy ovate basal leaves, and ovate to lance-shaped stem leaves. Flower heads, composed of conical, brown discs surrounded by slightly relaxed purple rays appear from midsummer to early autumn. Seedheads attract wildlife and provide winter interest. Sow outdoors in fall, or indoors in late winter after cold conditioning. Germinates in 10–20 days. Eastern and central U.S. Zones 3–9, 9–1.

**31 *Echinops ritro*.** Small globe thistle. Height: 2–3 feet. Spread: 1–2 feet. Compact, clump-forming perennial with stiff, spiny leaves. Globe-shaped, bright blue flower heads up to 2 inches across appear in late summer. Heat and drought tolerant. Attracts pollinators. Sow indoors in late winter at 70°F, or sow outdoors once the soil warms. Germinates in 15–60 days. Southeastern Europe. Zones 3–9, 12–1.

**32 *Erysimum perofskianum*.** Wallflower cultivar. Height and spread: up to 1 foot. Short-lived, evergreen perennial with lance-shaped leaves. Golden yellow, sweetly scented flowers are borne on short racemes from spring to early summer. Sow indoors 4–6 weeks before last frost date, or sow outdoors in late spring after last frost. Will bloom the following spring. Overwinters in mild climates. Germinates in 10–12 days. Middle East. Zones 6–8, 8–6.

**33 *Gaillardia ×grandiflora* 'Arizona Sun'.** Blanket flower cultivar. Height: ½–1 foot. Spread: 1–1½ feet. Tidy, bushy habit with coarse-toothed, hairy leaves. From summer to fall pro-

duces 3–4 inch flowers composed of orange-red petals tipped with yellow surrounding a yellow eye. Drought tolerant. Sow indoors 8–10 weeks prior to last frost or outdoors once soil warms. Germinates in 7–14 days. Central and southern U.S., Mexico. Zones 10–11, 12–1.

**34 *Helenium autumnale*.** Sneezeweed. Height: 2½–6 feet. Spread: 2–3 feet. An erect perennial with elongated, alternate, serrated leaves and daisy-like yellow flowers that bloom late summer to frost. Sow indoors 8–10 weeks before last frost or outdoors in early spring. Germinates in 7–10 days. Eastern North America. Zones 4–8, 8–1.

**35 *Hibiscus coccineus*.** Scarlet rosemallow, swamp hibiscus. Height: 5–10 feet. Spread: 3–5 feet. Multi-stemmed, woody-based plant with narrow upright habit and lobed leaves. The showy, deep red, funnel-shaped flowers located in the leaf axils bloom from midsummer to early fall. Stems die back to the ground in fall in cooler regions and new stems emerge later than many other perennials. Thrives in moist sites. Nick seeds and soak in hot water for one hour before sowing indoors, uncovered, 12 weeks before last frost. Germinates in 10–30 days. Southeastern U.S. Zones 6–11, 12–6.

**36 *Hosta* spp.** Hosta, plantain lily. Height: 1–2 feet. Spread: 2–3 feet. In general, hostas are clump-forming perennials featuring large, elegant, ribbed leaves. The flowers rise on slender stalks above the basal foliage in summer. These seeds are collected from several open-pollinated varieties. Part to full shade. Seed-grown hostas take 3 years to bloom. Sow outdoors in spring. Germinates in 10–14 days. China, Korea, Japan, eastern Russia. Zones 3–9, 9–2.

**37 *Iris sibirica*.** Siberian iris. Height: 2–4 feet. Spread: 2–4 feet. Clump-forming rhizomes give rise to gray-green, grasslike foliage that is sometimes red at the base. Delicate purple-blue flowers appear in spring. Prefers consistently moist soil and tolerates part shade. Cold condition seeds before sowing indoors in early spring, or sow outdoors in summer or early fall, uncovered. Germinates in 21–70 days. Central and eastern Europe, northeastern Turkey, Russia. Zones 3–9, 9–1.

**38 *Liatris aspera*.** Rough blazing star. Height: 3–5 feet. Spread: 2–3 feet. Upright stems arise from a basal tuft of narrow, lance-shaped leaves. Buttonlike, frilly, deep rose-purple flowers bloom at intervals on terminal spikes from late summer

into fall. Tolerates moist to dry soil and part shade. Host, nectar, and seed plant for butterflies and other wildlife. Cold condition or sow outdoors in fall. Germinates in 60 days. Midwest to eastern U.S. Zones 3–9, 9–3.

**39 *Lilium formosanum*.** Formosa lily. Height: 5–7 feet. Spread: 1–2 feet. Abundant dark green leaves up to 8 inches long cloak the erect stems of this lily. Fragrant, trumpet-shaped, 5- to 8-inch flowers are white inside and maroon to wine-colored outside. These bloom in leaf axils in late summer to early autumn. Grows best in moist, sandy soil; in warmer climates it needs afternoon shade. May require staking. Sow at 70°F indoors in late winter. Germinates in 14–28 days. Taiwan. Zones 6–9, 9–1.

**40 *Lobelia cardinalis*.** Cardinal flower. Height: 2–4 feet. Spread: 1–2 feet. Erect, clump-forming perennial with scarlet flowers that bloom on loose spikes from midsummer through fall. Tolerates part shade and moist sites. Attracts hummingbirds and butterflies. Self-sows. Cold condition seeds or sow outdoors in fall, uncovered. Germinates in 14–21 days. North America. Zones 2–8, 8–1.

**41 *Lychnis coronaria* ‘Alba’.** Rose campion cultivar. Height: 2–3. Spread: 1–1½ feet. Biennial or short-lived perennial with a rosette of ground-hugging, hairy, silver-gray, oval leaves up to 4 inches long. White flowers are borne on long stems in late spring into early summer. Tolerates part shade. Self-sows. Sow seeds indoors in late winter or outdoors in spring. Germinates in 7–30 days. Southern Europe. Zones 3–8, 8–1.

**42 *Ratibida columnifera*.** Mexican hat, upright prairie coneflower. Height: 1–3 feet. Spread: 1–1½ feet. This erect perennial has hairy, grayish green, divided leaves. From early summer to early autumn, long, thin, branching stems bear daisy-like flower heads, up to three inches across, with reflexed petals revealing large, columnar centers of green, then dark brown disk florets. Drought tolerant once established. Sow outdoors, lightly covered, in spring or fall. Germinates in 6–8 days. North America. Zones 3–10, 12–1.

**43 *Rudbeckia triloba*.** Brown-eyed Susan. Height: 2–3 feet. Spread: 1–1½ feet. A clumping biennial or short-lived perennial with small, abundant flowers with short, yellow rays surrounding a brown central cone and three-lobed, dark green basal leaves. Blooms from midsummer to frost. Self-sows. Sow outdoors in fall. Germinates in 7–10 days. Eastern and central North America. Zones 5–9, 10–1.

ates in 7–10 days. Eastern and central North America. Zones 5–9, 10–1.

**44 *Senna hebecarpa* (syn. *Cassia hebecarpa*).** Wild senna, American senna. Height: 4–6 feet. Spread: 3–5 feet. Multi-stemmed, shrubby perennial with compound blue-green leaves. Clusters of yellow flowers bloom on upright spikes in late summer, followed by showy beanlike seedpods in autumn. Tolerates part shade, moist soil, and heavy clay soil. Sow outdoors in fall or cold condition. Soaking seeds in warm water for 24 hours or nicking the seed coat may speed germination. Germinates in 30–90 days. Eastern North America. Zones 4–8, 8–4.

**45 *Verbena hastata*.** Blue vervain, blue verbena. Height: 2–6 feet. Spread: 1–2 feet. This biennial to short-lived perennial has erect stems and rough, serrated, lance-shaped to oblong leaves. Flowers, held in dense terminal panicles, are usually pink or lavender, but occasionally white. Blooms from midsummer to early fall. Self-sows. Sow outdoors in fall or cold condition seeds and then sow indoors in late winter, uncovered. Germinates in 1–3 weeks. Eastern and central North America. Zones 3–7, 7–1.

**46 *Verbesina virginica*.** Frostweed. Height: 6–8 feet. Spread: 1–2 feet. Upright perennial with large dark green leaves that bears dense clusters of white flowers from late summer to fall. The common name refers to the ethereal ice sculptures that form at the base of the plant in winter. Attracts pollinators and is host plant for butterflies. Best reserved for naturalistic gardens. Full to part shade. Self-sows. Sow outdoors in fall or cold condition seeds indoors for spring planting. Germinates in 6–8 weeks. Southeastern U.S. Zones 6–8, 8–5.

## VINES

**47 *Ipomoea tricolor* ‘Heavenly Blue’.** Morning glory cultivar. Height: 10–12 feet. Spread: up to 1 foot. Vigorous, fast-growing annual twining vine with heart-shaped, light to mid-green leaves. Funnel shaped azure-blue flowers with white throats bloom from midsummer to frost. Plant in moderately fertile soil, sheltered from drying winds. **Caution: Seeds are poisonous if ingested.** Soak seeds in warm water for 24 hours before sowing them indoors in late winter, or outdoors after last frost. Germinates in 7–14 days. Garden origin. Zones 0–0, 12–1.

**48 *Lathyrus odoratus*.** Sweet pea mixes. Height: 5–8 feet. Spread: 3–18 inches. Vigorous annual climber with fragrant flowers from early spring through midsummer. This mixture features more heat-tolerant varieties for warmer climates that will produce solid or bicolored flowers in a variety of red, pink, white, and blue shades. Provide support for climbing. Attracts bees and butterflies. **Caution: All parts of the plant are poisonous if ingested.** Sow indoors 6 weeks before last-frost date or sow outdoors in spring. Germinates in 12–28 days. Hybrid origin. Zones 0–0, 8–1.

**49 *Lathyrus odoratus*.** Sweet pea mix of ruffled varieties. Height: 5–8 feet. Spread: 3–18 inches. Vigorous annual climber with fragrant flowers from early spring through midsummer. Ruffled flowers bloom in shades of maroon, red, pink, purple, and white. Provide support for climbing. Attracts bees and butterflies. Sow indoors 6 weeks before last-frost date or sow outdoors in spring. Germinates in 12–28 days. **Caution: All parts of the plant are poisonous if ingested.** Hybrid origin. Zones 0–0, 8–1.

**50 *Lathyrus odoratus* ‘North Shore’.** Heirloom sweet pea cultivar. Height: 4–10 feet. Spread: 3–18 inches. Annual climber with ruffled claret and violet-blue bicolor flowers from early spring through midsummer. Provide support for climbing. Attracts bees and butterflies. Sow indoors 6 weeks before last-frost date or sow outdoors in spring. Germinates in 12–28 days. **Caution: All parts of the plant are poisonous if ingested.** Hybrid origin. Zones 0–0, 8–1.

**51 *Lathyrus odoratus* ‘Painted Lady’.** Heirloom sweet pea cultivar. Height: 3–8 feet. Spread: 3–18 inches. First named cultivar dates back to the 1700s. Annual climber sports white-and-pink bicolor blossoms from early spring through midsummer. Provide support for climbing. Attracts bees and butterflies. Sow indoors 6 weeks before last-frost date or sow outdoors in spring. Germinates in 12–28 days. **Caution: All parts of the plant are poisonous if ingested.** Hybrid origin. Zones 0–0, 8–1.

**52 *Lathyrus sativus* var. *azureus*.** Blue sweet pea, chickling pea. Height: 3–4. Spread: 3–18 inches. Annual climber bears solitary dainty blue flowers with pink veins in summer. Pinch back to encourage branching. Good in containers. Provide part shade in warmer regions. Sow indoors 6 weeks before last-frost date or sow outdoors in spring. Germinates in 12–28 days. **Caution: All**

**parts of the plant are poisonous if ingested.** Central and southern Europe, northern Africa, southwestern Asia. Zones 0–0, 8–1.

## TREES & SHRUBS

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**53 *Acer griseum*.** Paperbark maple. Height: 20–30 feet. Spread: 10–15 feet. This deciduous tree has an upright, oval to rounded habit, with dark green, 4-inch-long leaves that turn reddish purple in fall and cinnamon-brown, exfoliating bark. Tolerates part shade. Seed sown outdoors in fall may take 2 years to germinate. Or seed can be cold conditioned for 3 months in moist peat before planting outdoors. Removing impervious seed coat before or after stratification may hasten germination. Central China. Zones 4–8, 10–3.

**54 *Firmiana simplex*.** Chinese parasol tree. Height: 30–50 feet. Spread: 20–30 feet. A rounded tree with smooth green bark, it bears large, tropical-looking, deeply lobed dark green leaves that turn yellow in fall. In summer, small, yellow-green flowers bloom in showy 8- to 12-inch panicles. By autumn, small rounded fruits open to expose papery seeds. In protected locations of USDA Zones 6 and 7 where it is root hardy, it can be grown as a shrub by cutting stems back to the ground in late winter. Sow in spring after soil warms. **Caution: Has exhibited a tendency to self sow where fully hardy in the southern U.S.** Germinates in 14–35 days. Eastern Asia. Zones 7–11, 12–6.

**55 *Magnolia grandiflora*.** Southern magnolia, bull bay magnolia. Height: 60–80 feet. Spread: 30–50 feet. Pyramidal shaped tree with leathery, glossy, evergreen leaves, up to 10 inches long. Extremely fragrant, creamy white blossoms up to a foot across bloom in late spring and intermittently throughout the summer. Cone-shaped seedheads release bright red seeds in early fall. Tolerates part shade. Cold condition seeds and then sow outdoors in containers in early spring. Transplant seedlings to individual containers shortly after germination. Germinates in 7–21 days. Southeastern U.S. Zones 6–9, 9–6.

**56 *Mimosa pudica*.** Sensitive plant. Height: 3–5 feet. Spread: 1–3 feet. This shrubby evergreen plant is usually grown as a novelty houseplant. The bright green, fernlike, compound leaves fold up when touched and at night. It produces rounded, light pink to lilac flowerheads in summer upon slender, prickly stems. Sow indoors and keep it at temperatures above 65°F. Germinates in 7–14 days. South America. Zones 11, 12–1.

**57 *Plumeria rubra*.** Frangipani. Height: 15–25 feet. Spread: 15–25 feet. Very fragrant, pink to red flowers grace this small vase-shaped tree that has smooth, pale green bark. Elliptical dark green leaves cluster in a spiral at the end of fleshy branches that give off sticky white sap if cut. Flowers bloom at the branch tips from late spring to fall. In tropical areas, plants will bloom for much of the year, but in areas where temperatures dip below 50 degrees during winter/dry season, plants will have a dormant period and lose their leaves. In cooler climates, grow in containers and overwinter indoors or in a greenhouse. Sow indoors at 70° F, using a free-draining potting soil. Germinates in 7–21 days. Mexico and Central America. Zones 10–11, 12–9.

**58 *Quercus macrocarpa*.** Bur oak. Height: 60–80 feet. Spread: 60–80 feet. Majestic deciduous shade tree with broad-spreading, rounded crown. Dark green, deeply lobed leaves turn pallid yellow to tan in fall. May take up to 35 years to bear its large acorns that nest deeply in decoratively fringed caps. Drought tolerant. Sow outdoors or in a cold frame in fall to early winter, providing protection from rodents. Germinates in 3–4 months. Northern and central U.S., southeastern and central Canada. Zones 2–8, 8–2.

**59 *Sophora secundiflora*.** Mescal bean, Texas mountain laurel. Height: 20–35 feet. Spread: 15–30 feet. Evergreen tree with shiny, leathery compound leaves and violet, scented, wisterialike flowers that bloom in dangling clusters from February to April in its native habitat. Upright and sculptural branches. Brown seed pods up to 8 inches long mature in late summer, cracking open to reveal bright red seeds. Requires free-draining soils; drought tolerant. Nick seed coats before sowing indoors in early spring at 70°F. Germinates in 7–21 days. **Caution: Seeds are poisonous if chewed and swallowed.** Texas, New Mexico, and Mexico. Zones 8–11, 12–7.

## HERBS

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**60 *Allium schoenoprasum*.** Chives. Height and spread: up to 1½ feet. This bulbous perennial herb has edible, cylindrical, hollow leaves with a mild onion flavor and bell-shaped, white or purple flowers in a dense umbel in summer. Tolerates part shade and moist soil. Sow seeds, barely covered, in spring. Germinates in 10–14 days. Matures in 40 days. Europe, Asia, North America. Zones 3–9, 9–5.

**61 *Allium tuberosum*.** Garlic chives, Chinese chives. Height: 1–2 feet. Spread: 1 foot. This

bulbous perennial's flat, grasslike leaves have a mild garlic flavor. Loose clusters of fragrant white flowers bloom on narrow stalks in late summer to early fall. Both the flowers and leaves are edible. Self-sows and can be somewhat invasive. Sow outdoors in fall or cold condition; barely cover seeds. Germinates in 7–14 days. Matures in 60–90 days. Southeastern Asia. Zones 4–8, 8–1.

**62 *Anethum graveolens*.** Dill. Height: 3 feet. Spread: 1 foot. An annual herb with feathery, compound bluish green leaves. Tiny, pale yellow, edible flowers appear in flat umbels from July to September. Aromatic leaves and seeds are used to season foods. Attracts beneficial insects. Self-sows. Sow outdoors in early spring after danger of frost. Barely cover seeds. Germinates in 7–21 days. Matures in 40 days. Southwestern Asia to India. Zones 0–0, 11–1.

**63 *Levisticum officinale*.** Lovage. Height: 2–6 feet. Spread: 1 foot. Reminiscent of celery but with a stronger flavor, this perennial has fibrous fleshy stalks topped with serrated gray-green foliage. Small cream-colored flowers yield seed that can be used like celery seed. Stalks and foliage are used in soups, stews, and raw in salads. Sow outdoors in spring or fall. Germinates in 7–14 days. Asia. Zones 4–8, 8–3.

**64 *Ocimum basilicum*.** Sweet basil. Height: 1½–2½ feet. Spread: 1 foot. Erect, aromatic plant with branching stems and small, tubular flowers borne on spikes. Prized for flavorful, bright green, 4- to 6-inch-long leaves that have a faint clovelike scent. Sow indoors, uncovered, 4–6 weeks before last frost or outdoors after soil has warmed. Germinates in 7–10 days. Matures in 65–75 days. Tropical and subtropical Asia. Zones 0–0, 12–1.

**65 *Salvia officinalis*.** Common or culinary sage. Height: 2–3 feet. Spread: 3 feet. Erect perennial with aromatic, oblong, woolly gray-green leaves and violet-blue flower spikes in early and midsummer. Leaves are used fresh or dried to season foods. Drought tolerant. Sow outdoors once soil has warmed. Germinates in 14–21 days. Mediterranean. Zones 5–8, 8–1.

## VEGETABLES & FRUITS

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**66 *Allium ampeloprasum* 'Striesen'.** Leek cultivar. Height: 1 foot. Spread: 4–6 inches. Large, upright, non-bulbing onion is grown for its mild-flavored stems and leaves. A long-season plant, leeks can be sown outdoors in spring or fall in warmer regions, or started indoors in late win-

ter and transplanted outdoors for fall and winter crops in northern states. Will winter over in mild winter climates. Germinates in 7–14 days. Matures in 100 days. Europe, Asia. Zones 10–11, 7–1.

**67 *Allium cepa* ‘Rossa Lunga di Firenze’.** Bunching onion cultivar. Height: 12–18 inches. Spread: 2–3 inches. This intermediate day-length onion has vibrant pink torpedo-shaped, 4- to 5-inch bulbs. Harvest early for use as scallions, or later for more pungent-flavored onions. Sow indoors in mid winter or outdoors when soil warms. Germinates in 7–14 days. Matures in 90 days. Zones 10–11, 11–2.

**68 *Allium fistulosum* ‘White Lisbon’.** Green onion, scallion cultivar. Height: 1–2 feet. Spread: 1–2 inches. This upright heirloom onion is a scallion type that doesn’t produce a prominent bulb. Harvest at pencil size. The entire bulb and stem has a mild onion flavor. Sow indoors 8 weeks before last frost or outdoors in after last frost. Germinates in 7–14 days. Matures in 60–70 days. Northern Hemisphere, central Asia. Zones 11, 11–2.

**69 *Beta vulgaris* ‘Ruby Queen’.** Beet cultivar. Height: 6–10 inches. Spread: 4 inches. Tender, early beet that tolerates light frosts. Dependably produces uniform 2-3 inch beets, and the leaves make delicious greens. Suitable for containers. Sow presoaked seeds outdoors in early spring, 3–4 weeks before last frost date, and in late summer for a fall crop. In mild-winter areas, sow in early fall for a late winter harvest. Germinates in 5–25 days. Matures in 50–65 days. Africa, Europe, Asia. Zones 8–9, 9–1.

**70 *Beta vulgaris* var. *cicla*.** Random offering of Swiss chard cultivars ‘Italian Silver Rib’ or ‘Scarlet Charlotte’. Height: 2 feet. Spread: 1–1½ feet. Fast-growing Swiss chard develops as upright clusters of leaves, each supported by a thick, fibrous stalk. These selections are noted for the stalk color: Italian heirloom ‘Silver Rib’ glows white in the garden and ‘Scarlet Charlotte’ is a vibrant red. Let 3–4 leaves remain when harvesting for plant to continue to produce greens. Plant in full sun, but tolerates some shade. Sow outdoors, ½ inch deep, 3–4 weeks before last-frost date, and in late summer for a fall crop. In frost-free areas, sow in early fall for a late-winter harvest. Stagger sowings to extend harvest. Germinates in 7–14 days. Matures in 45–60 days. Africa, Europe, Asia. Zones 8–9, 9–1.

**71 *Beta vulgaris* var. *cicla* ‘Pot of Gold’.** Swiss chard cultivar. Height: 1–2 feet. Spread: 1 foot. Compact and ornamental enough to be grown in a

container. This cultivar develops an upright cluster of edible leaves with golden colored thick central midribs. Let 3–4 leaves remain when harvesting for plant to continue to produce greens. Tolerates some shade. Sow outdoors, ½ inch deep, 3–4 weeks before last-frost date, and in late summer for a fall crop. In frost-free areas, sow in early fall for a late-winter harvest. Stagger sowings to extend harvest. Germinates in 7–14 days. Matures in 35–50 days. Africa, Europe, Asia. Zones 8–9, 9–1.

**72 *Brassica juncea*.** Random offering of mustard cultivars ‘Southern Giant Curled’ or ‘Mild Mustard Mix’. Height: 6–12 inches. Spread: 12 inches. Heirloom ‘Southern Giant Curled’ is a fast-growing, cold-tolerant mustard green with a mild spicy flavor and attractive upright bright green ruffled leaves. ‘Mild Mustard Mix’ includes ‘Tender Green’, ‘Florida Broadleaf’, and ‘Southern Giant’. Sow outdoors, barely covered, 3–4 weeks before last frost, with successive plantings every 2 weeks through spring to extend harvest. Sow again in late summer for fall crop. In mild-winter regions, sow in fall for winter crop. Germinates in 5–10 days. Matures in 40–60 days. Northern Hemisphere, Asia. Zones 0–0, 12–1.

**73 *Brassica oleracea* var. *acephala* ‘Lacinato’.** Kale cultivar. Height: 1–3 feet. Spread: 1 foot. Often called “dinosaur” kale, this variety features tender, green, heavily crenellated leaves with a sweet flavor. Sow outdoors in early spring. Succession sow in spring for continued harvest and then sow again in late summer for fall and winter harvest. Germinates in 7–14 days. Matures in 65 days. Garden origin. Zones 0–0, 12–3.

**74 *Capsicum annuum*.** Random offering of bell pepper cultivars ‘Canary Bell’, ‘Coral Bell’, or ‘California Wonder’. Height: 2–3 feet. Spread: 2 feet. ‘Canary Bell’ matures to yellow, ‘Coral Bell’ matures to orange, and ‘California Wonder’ matures to red. All three can be eaten at the green stage. Blocky shaped sweet bell peppers have crisp, thick flesh that become sweeter as the fruits color up. Sow indoors 4–6 weeks before last frost date. Transplant hardened seedlings outdoors after soil warms. Germinates in 7–14 days. Matures in 120 days. Central and South America. Zones 9–11, 12–1.

**75 *Capsicum annuum*.** Thai chili pepper cultivar mix of ‘Full Moon’ and ‘Vesuvius’. Height: 2½–3 feet. ‘Full Moon’ peppers are medium hot and ripen to orange. Hot ‘Vesuvius’ peppers point upward from the plant. Harvest when fruit is glossy and reaches full color. Good for drying. Seed is col-

or-coded: Red= ‘Vesuvius’; Plain= ‘Full Moon’. Sow indoors 4–6 weeks before last frost date. Transplant hardened seedlings outdoors after soil warms. Germinates in 7–14 days. Matures in 120 days. Central and South America. Zones 9–11, 12–1.

**76 *Cichorium endivia* var. *crispum* ‘Glory’.** Curly endive cultivar. Height: 1 foot. Spread: 1 foot. The frilly outer leaves of this endive are bright green. The slightly bitter-tasting leaves are used in salads or soup, but the plant also makes an attractive addition to the ornamental garden. Sow outdoors after last frost or in late summer for fall crop; in mild-winter regions, sow in early fall for winter crop. Germinates in 7–14 days. Matures in 80 days. Garden origin. Zones 0–0, 8–1.

**77 *Cucumis melo*.** Random offering of heirloom cantaloupe cultivars ‘Hales Best Jumbo’ or ‘Imperial 45’. Height: up to 1 foot. Spread: 6–12 feet. ‘Hale’s Best Jumbo’ is known for producing many 3- to 5-pound fruits with orange-pink flesh. ‘Imperial 45’ cantaloupe tolerates heat and humidity while producing orange fleshed fruits with a small seed cavity. Start indoors in biodegradable pots 4–6 weeks before last frost date and transplant when soil warms in spring, or sow outdoors after soil warms. Germinates in 5–10 days. Matures in 87 days. Asia Minor. Zones 0–0, 12–3.

**78 *Cucumis melo* ‘Melone Retato Degli Ortolani’.** Melon cultivar. Height: up to 1 foot. Spread: 10–15 feet. Originally developed in Europe, this heirloom cantaloupe’s fruit is more deeply ribbed than others. The orange flesh is aromatic and sweet. Start indoors in biodegradable pots 4–6 weeks before last frost date and transplant when soil warms in spring, or sow outdoors after soil warms. Germinates in 5–10 days. Matures in 80 days. Asia Minor. Zones 0–0, 12–3.

**79 *Cucumis sativus* ‘Endeavor’.** Slicing and pickling cucumber cultivar. Height: 3–12 feet. Spread: 10 inches. This high-yielding variety produces knobby, curved fruit that is best picked at 3–4 inches long to pickle or larger for salad. Picked early they are small seeded and crisp. Mature fruit can be up to 1 foot long. Train vines on trellis for easier harvest. Sow indoors 4 weeks prior to last frost, or sow outdoors after night temperatures are reliably above 50°F. Germinates in 7–10 days. Matures in 50 days. Asia, Middle East. Zones 0–0, 12–1.

**80 *Cucumis sativus*.** Random offering of slicing cucumber cultivars. ‘Straight Eight’ or ‘Poinsett

76'. Height: 8 feet. Spread: 1 foot. 'Straight Eight' bears very uniform, blunt-ended, dark green, 8-inch fruits on vigorous vines. 'Poinsett 76' bears 8- or 9-inch, smooth skinned, dark green fruit. Both are disease-resistant. Train vines on trellis for easier harvest. Sow indoors 4 weeks prior to last frost, or sow outdoors after night temperatures are reliably above 50°F. Germinates in 7–10 days. Matures in 60–65 days. Asia, Middle East. Zones 0–0, 12–1.

**81 *Cucumis sativus*.** Heirloom yellow cucumber variety. Height: 3–5 feet. Spread: 1–1½ feet. Pale green cukes shaped like lemons, they turn pastel yellow as they age, have thin skin and mild sweet flesh. Consistent moisture and regular picking keeps vines producing. Sow indoors 4 weeks prior to last frost, or sow outdoors after night temperatures are reliably above 50°F. Germinates in 7–10 days. Matures in 60–70 days. Asia, Middle East. Zones 0–0, 12–1.

**82 *Curcubita pepo*.** Acorn squash variety. Heavy yields of mild-flavored, white-fleshed acorn squash are produced on compact bush-type plants. Start indoors in biodegradable pots 3 weeks before last frost date or sow outdoors when soil warms in spring. Germinates in 5–15 days. Matures in 80–90 days. Americas. Zones 0–0, 12–1.

**83 *Curcubita pepo* 'Bennings Green Tint'.** Pattypan summer squash cultivar. Height: 2 feet. Spread: 2 feet. Bush-type, fast-growing heirloom plant produces mild-flavored fruits with decorative scalloped edges that are best harvested when 3–4 inches in diameter. Start indoors in biodegradable pots 3 weeks before last frost date or sow outdoors when soil warms in spring. Germinates in 5–15 days. Matures in 50–57 days. Americas. Zones 0–0, 12–1.

**84 *Curcubita pepo*.** Random offering of pumpkin cultivars 'Big Max' or 'Jack O'Lantern'. Both of these classics are good all-around pumpkins for carving, pies, roasted seeds, and edible flowers. 'Big Max' produces 70- to 100-pound pumpkins up to 20 inches in diameter. Matures in 90–100 days. 'Jack O'Lantern' produces 4- to 10-pound fruits with smooth, bright orange skin on vines ranging from 4 to 12 feet. Matures in 100–110 days. Start indoors in biodegradable pots 3 weeks before last frost date or sow outdoors when soil warms in spring. Germinates in 5–15 days. Americas. Zones 0–0, 12–1.

**85 *Curcubita pepo* 'Cinderella's Carriage'.**

Pumpkin cultivar. This heirloom bears flattened, orange-red fruits that can reach 20 to 35 pounds with yellow, sweet, nutty-flavored flesh. The vigorous, disease-resistant vines can produce 5–7 fruits per plant. Start indoors in biodegradable pots 3 weeks before last frost date or sow outdoors when soil warms in spring. Germinates in 5–15 days. Matures in 100 days. Americas. Zones 0–0, 12–1.

**86 *Curcubita pepo* 'Early Sugar'.** Pumpkin cultivar. Eight-inch-diameter pumpkins have sweet, fine textured flesh perfect for pies. Start indoors in biodegradable pots 3 weeks before last frost date or sow outdoors when soil warms in spring. Germinates in 5–15 days. Matures in 90 days. Americas. Zones 0–0, 12–1.

**87 *Daucus carota ssp. sativus*.** Random offering of carrot cultivars 'Little Finger' or 'Tendersweet'. Height: 1–1½ feet. Spread: 2 inches. 'Little Finger' is a deep orange cultivar with a blunt tip. Harvest as a baby carrot at 3 inches or at maturity at 6 inches. Matures in 60 days. 'Tendersweet' is a traditional carrot shape with a small core. Harvest when 8–10 inches long. Matures in 70 days. Sow outdoors, barely covered, in deep, loamy soil after last frost. In mild-winter regions, sow in fall for winter crop. Germinates in 7–10 days. Europe. Zones 9–11, 10–1.

**88 *Daucus carota ssp. sativus* 'Round Romeo'.** Carrot cultivar. Height: 6–10 inches. Spread: 2 inches. Petite, ball-shaped carrots need no peeling to enjoy the sweet flavor and crunchy texture. Perfect for containers. Harvest at 1½ inches in diameter. Sow outdoors, barely covered, in deep, loamy soil after last frost. In mild-winter regions, sow in fall for winter crop. Germinates in 7–14 days. Matures in 50–70 days. Garden origin. Zones 9–11, 10–1.

**89 *Eruca versicaria var. sativa*.** Arugula. Height: 8–10 inches. Spread: 6 inches. A leafy, lettuce-like plant prized for the spicy, peppery flavor of its dark green, 2- to 4-inch leaves. The small yellowish flowers are edible, too. Tends to bolt in the summer heat and leaves become very pungent. Sow in early spring as soon as the ground can be worked and reseed every 2 weeks to ensure an ongoing supply. Sow again in late summer for a fall crop. Germinates in 7–10 days. Matures in 21–30 days. Mediterranean. Zones 0–0, 9–1.

**90 *Lactuca sativa*.** Random offering of lettuce cultivars 'Sweetie Baby' or 'Tom Thumb'. Vase

shaped 'Sweetie Baby', a compact green romaine type lettuce that grows 6–8 inches tall and 6 inches wide, does well in containers. It is heat tolerant and slow to bolt. Matures in 50–70 days. English heirloom 'Tom Thumb', a butterhead type, yields tennis ball-sized head of crumpled green leaves with a sweet, mild flavor. Matures in 40 days. Sow uncovered outdoors in early spring and again in late summer for fall crops. In mild-winter regions, sow in fall for winter crop. Germinates in 7–14 days. Northern Hemisphere. Zones 0–0, 12–1.

**91 *Lactuca sativa*.** Mix of lettuce cultivars. Height: to 1 foot. Spread: to 1 foot. Add variety to your salad bowl with this "potluck" mix of red and green lettuce cultivars. All are tender and sweet, particularly when harvested young. Sow uncovered outdoors in early spring and again in late summer for fall crops. In mild-winter regions, sow in fall for winter crop. Germinates in 7–14 days. Matures in 40–60 days. Northern Hemisphere. Zones 0–0, 12–1.

**92 *Lactuca sativa* 'Kagraner Sommer'.** Lettuce cultivar. Height: 1 foot. Spread: 1 foot. This heirloom, heat-tolerant butterhead variety produces soft rosettes of medium green, sweet leaves. Sow uncovered outdoors in early spring and again in late summer for fall crops. In mild-winter regions, sow in fall for winter crop. Thin to 12 inches apart to allow heads to form. Germinates in 7–14 days. Matures in 58 days. Northern Hemisphere. Zones 0–0, 12–1.

**93 *Lactuca sativa* 'Merveille de Quatre Saisons'.** Lettuce cultivar. Height: 1 foot. Spread: 1 foot. This French heirloom Bibb-type lettuce has red-tinged leaves and a pale green heart. The coloration is more vibrant when temperatures are cool. Sow uncovered outdoors in early spring and again in late summer for fall crops. In mild-winter regions, sow in fall for winter crop. Germinates in 7–14 days. Matures in 45–70 days. Northern Hemisphere. Zones 0–0, 12–1.

**94 *Lactuca sativa* 'Red Salad Bowl'.** Lettuce cultivar. Height: 6–12 inches. Spread: 12 inches. This loose-leaf selection has bronze-red, deeply lobed leaves with excellent flavor. Sow uncovered outdoors in early spring and again in late summer for fall crops. In mild-winter regions, sow in fall for winter crop. Germinates in 7–14 days. Matures in 40 days. Northern Hemisphere. Zones 0–0, 12–1.

**95 *Pastinaca sativa* 'Hollow Crown'.** Parsnip cultivar. Height: 1–2 feet. Spread: 4–6 inches.

Hardy, cool-season heirloom with tapered, cream-colored roots 1–2 inches in diameter and 4–9 inches long. The roots have a mild, nutty flavor. Store in the garden to harvest through the winter. For best flavor, harvest after first frost. Sow outdoors in early spring as soon as soil can be worked, or in mild-winter regions in early fall for spring harvest. Germinates in 15–20 days. Matures in 100–110 days. Europe. Zones 7–9, 9–1.

**96 *Phaseolus vulgaris* ‘Classic Slenderette’.** Bush bean cultivar. Height: 1–2 feet. Spread: 4 inches. This cultivar produces rounded, bright green pods up to 5 inches long that are tender and crunchy. Resistant to bean mosaic and curly top viruses. Germinates in 5–10 days. Matures in 53 days. Garden origin. Zones 0–0, 12–1.

**97 *Phaseolus vulgaris* ‘Roma Improved’.** Bush bean cultivar. Height: 2 feet. Spread: 1–2 feet. Early, vigorous, and reliable heirloom variety. Bears flat, wide, 5-inch long stringless pods with rich flavor. Sow outdoors in spring after soil has warmed. Germinates in 5–10 days. Matures in 50–60 days. Garden origin. Zones 0–0, 12–1.

**98 *Phaseolus vulgaris*.** Mix of pole bean cultivars ‘Rattlesnake’ and ‘Purple Pole’. ‘Rattlesnake’ grows to 12 feet tall, bearing distinctive dark green, 7-inch-long pods streaked with purple. The light buff seeds are splashed with dark brown markings. ‘Purple Pole’ tops out at 6–8 feet, bearing 6- to 8-inch-long, deep purple pods that turn green when cooked. Harvest at different points of maturity for use as snap, shell, or dry beans. Sow outdoors in spring after soil has warmed. Germinates in 5–10 days. Matures in 60–75 days. Garden origin. Zones 0–0, 12–1.

**99 *Pisum sativum*.** Random offering of snow pea cultivars ‘Oregon Sugar Pod II’ or ‘Oregon Giant’. Height: 2 feet. Spread: 2–3 inches. ‘Oregon Sugar Pod II’ produces a bounty of sweet pods on vigorous, high-yielding, disease-resistant vines. ‘Oregon Giant’ pods are about 5 inches long. Sow outdoors in early spring as soon as soil can be worked. Stagger plantings at 2-week intervals until early summer. Fall crops may be planted beginning in late summer. In mild-winter regions, sow in fall for winter crop. Germinates in 7–14 days. Matures in 60–75 days. Mediterranean. Zones 7–9, 8–1.

**100 *Pisum sativum* ‘Sabre’.** Shelling pea cultivar. Height: 2–3 feet. Spread: 2–3 inches. This disease resistant cultivar produces a prolific har-

vest of pods, each of which contains 10–12 peas. Sow outdoors in early spring as soon as soil can be worked. Stagger plantings at 2-week intervals until early summer. Fall crops may be planted beginning in late summer. In mild-winter regions, sow in fall for winter crop. Germinates in 7–14 days. Matures in 60–75 days. Mediterranean. Zones 7–9, 8–1.

**101 *Raphanus sativus* ‘Petit Déjeuner’.** Radish cultivar. Height: 4–6 inches. Spread: 2 inches. Red-skinned, white-fleshed “French Breakfast” type radish may be globular or cylindrical in form, with mild flavor and a crisp texture. Sow outdoors as soon as soil can be worked in spring, and again starting in late summer for fall harvest. Germinates in 5–7 days. Matures in 28 days. Garden origin. Zones 0–0, 8–1.

**102 *Raphanus sativus* ‘White Icicle’.** Radish cultivar. Height: 4–6 inches. Spread: 2 inches. This white-fleshed, slender, gently tapered radish grows 5 to 6 inches long, retaining its mild flavor even at maturity. More heat tolerant than other radishes. Sow crops weekly outdoors as soon as soil can be worked in spring, and again starting in late summer for fall harvest. Germinates in 5–7 days. Matures in 28 days. Garden origin. Zones 0–0, 8–1.

**103 *Solanum lycopersicum* ‘Jubilee’.** Tomato cultivar. Height: determinate, 5 feet. Spread: 2 feet. This slicing tomato bears yellow, 8-ounce fruits with a mild flavor and few seeds. Sow indoors 6–8 weeks before the last frost date. Transplant hardened-off seedlings outdoors after soil warms. Germinates in 7–14 days. Matures in 75–85 days. South America. Zones 11, 12–1.

**104 *Solanum lycopersicum* ‘Roma’.** Tomato cultivar. Height: Determinate, 9 feet. Spread: 2 feet. This classic plum-type tomato produces an abundance of bright red, oblong, meaty fruits with few seeds. Excellent for sauces or canning. Sow indoors 6–8 weeks before the last frost date. Transplant hardened-off seedlings outdoors after soil warms. Germinates in 7–14 days. Matures in 75–85 days. South America. Zones 11, 12–1.

**105 *Solanum melongena* ‘Little Prince’.** Eggplant cultivar. Height: 2 feet. Spread: 2 feet. Erect shrubby plant with green to gray simple leaves that bears drooping violet flowers in early summer, followed by shiny purple clusters of 3- to 4-inch oval fruits. Sow indoors 6–8 weeks before night temperatures are reliably above 55°F, then transplant

outdoors. Germinates in 10–21 days. Matures in 65–85 days. Garden origin. Zones 0–0, 12–5.

**106 *Solanum melongena* ‘Violetta Lunga’.** Eggplant cultivar. Height: 2–2½ feet. Spread: 2 feet. This Italian heirloom eggplant bears deep violet cylindrical fruits. Sow indoors 6–8 weeks before night temperatures are reliably above 55°F, then transplant outdoors. Germinates in 10–21 days. Matures in 70 days. Garden origin. Zones 0–0, 12–5.

**107 *Spinacia oleracea* ‘Bloomsdale Long Standing’.** Heirloom spinach cultivar. Height: up to 1 foot. Spread: 6 inches. Reliable heirloom variety that forms rosettes of crinkly, tender leaves. Slow to bolt. Sow outdoors 4 weeks before last frost. In the fall, sow 8 weeks before first frost. Germinates in 5–10 days. Matures in 45 days. Garden origin. Zones 0–0, 12–1.

**108 *Triticum monococcum*.** Einkorn wheat. Height: 2–3 feet. Spread: 1 foot. This is the cultivated form of the wild wheat that was one of the earliest crops domesticated by humans. It is high in protein, phosphorus, and potassium compared with traditional wheat. Sow outdoors in early spring, or in fall in regions with mild winters; barely cover seeds. Germinates in 3–7 days. Matures in 100–120 days. Middle East. Zones 0–0, 8–4.

**109 *Zea mays* ‘Kandy Korn’.** Sweet corn cultivar. Height: 8–10 feet. Spread: 1 foot. Hybrid cultivar bears 8- to 9-inch-long ears of sweet-tasting, yellow-kernelled corn. Sow outdoors 2 weeks after last frost, in blocks rather than rows to enhance pollination. Germinates in 7–14 days. Matures in 76–78 days. Hybrid origin. Zones 0–0, 12–1.