

# FRUITION SEEDS

guide to organically growing

# CALENDULA

## AT A GLANCE

**Latin Name:** *Calendula officinalis*

**Sun:** Full for optimum blossoms; partial shade will bloom less abundantly

**Life Cycle:** Annual Self-Sowing Annual

**Ease of care:** Easy

**Direct sow or transplant:** Either

**Height:** 2 feet

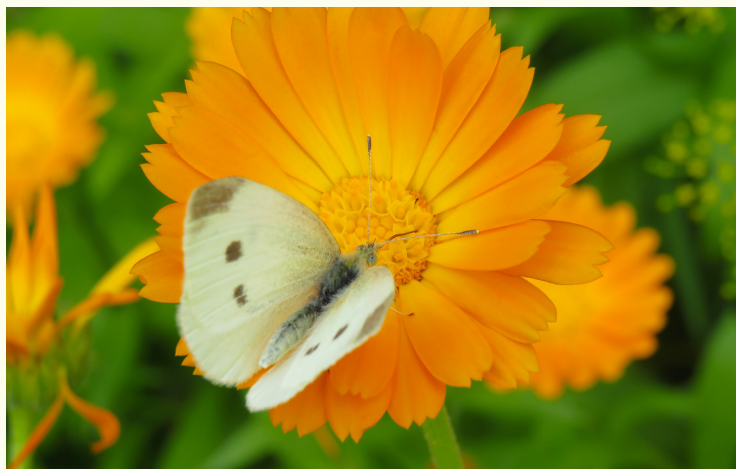
**Container Friendly:** Exceptionally!

**Edible Flower:** Delectably

Native to the Mediterranean, calendula is an ebullient edible and medicinal flower that has now naturalized across the globe. Also known as pot marigold, 'calendula' in latin roughly translates to 'little clock' and indeed, calendula readily self-sows and blossoms abundantly across the seasons. We love to toss her delectable petals on salads, cakes, quiches & steamed with rice as 'peasant saffron'; we also love to make anti-inflammatory salves, compresses and tea to enjoy all winter long. There are countless ways to revel in their cheerful resilience and be forewarned: calendula quickly becomes a carpet as a readily self-sowing annual, so harvest the flowers for food, medicine, dye, ceremony and beyond.

## TYPES OF CALENDULA

**Edible:** All calendula petals are both edible and medicinal, though edible varieties have lighter, brighter flavors with no medicinal resin. Simply pluck the petals from each blossom (the center of the flower is oh so bitter) and toss on salads, cakes and everything in between! We dry petals to toss into rice as 'peasant saffron' as well as quiches in winter to add a burst of sunshine. Calendula tea is also a welcome dose of sunshine in any season.



Once all calendula varieties mature seed, they resist flowering with the same vigor. Consistently harvesting blooms and deadheading inspires more blossoms! Also, beyond simply plucking flowers, follow each blossom down its stem and harvest the entire stem. Though more effort, this 'pruning' of your calendula allows more light and airflow to stimulate greater flower production.

for cutting with long, strong stems. Dive into the dazzling diversity of calendula to celebrate an astonishing array of petal colors (and bi-colors!) as well as petal shape and arrangement. And Friends, if you're growing calendula purely for ornamental purposes, know your pollinators will be delighted.

**Medicinal:** All calendula petals are both edible and medicinal, though medicinal varieties (like our Resina) are more bitter and sticky with leaves, stems and petals covered in concentrated

**Ornamental:** All calendulas are edible & medicinal as well as beautiful! Some varieties (like our Zeolights) are ideal

medicinal resins, fabulous for making medicine! These resins also make them much less palatable in a salad.



## SOW

**Soil:** Calendula, more than many other flowers, thrives almost anywhere they are sown. Rich, well-drained soil with full sun will grow the healthiest plants with the most abundant blossoms.

**Days to Germination:** 7 days at 70°F/21°C; 14 days at 55°F/12°C. If snow has melted but daffodils haven't yet bloomed, days to germination may be even longer.

**When:** Calendula has an extraordinarily wide sowing window, from as soon as the soil can be worked in early spring (along with your peas!) until one month before frost in fall.

**Direct Sow or Transplant:** Calendula is adaptable, so establish calendula in any way that brings your life more ease and joy. Here are some practical tips as well as pros and cons for each approach:

**Direct Sow:** Calendula may be direct-sown as soon as the soil can be worked and anytime until about two months before frost. Sow 3 seeds 1/4" deep every foot & thin to the strongest one once they emerge.

**Pros:** No transplanting necessary!

**Cons:** Direct sown seeds often require more weeding.

**Transplant:** About 4 weeks before last frost, sow 2 seeds per soil block or cell, thinning to the strongest one once they emerge. Once your seedlings have two sets of true leaves, often 3 to 4 weeks later, they're ready to acclimate to life outside. This process, also called 'hardening off,' is described in detail in our *5 Tips for Gorgeous Transplants* blog.

**Pros:** Transplants can be planted straight into mulch, reducing weeding; transplanting also optimizes each individual seed.

**Cons:** A good seed starting setup (including a great grow light) is crucial for truly healthy seedlings.

**Spacing in Row:** 1' between plants (if direct sowing, sow 3 seeds every foot and thin to the strongest 1 as soon as first true leaves begin to emerge).

**Spacing Between Rows:** 1' between rows

**Sowing Depth:** ¼"

**Thinning:** Whether you direct sow or transplant calendula, thinning is crucial. Direct sown, sow three seeds per foot and thin to the strongest one once true leaves are emerging above the cotyledons. Transplanted calendula are sown into soil blocks, cells or other containers, two seeds thinned one once cotyledons emerge.



*For edible flowers, harvest once blossoms are fully open, pluck delectable petals from their bitter centers. For medicine, harvest in early morning when the flowers contain the highest concentrations of medicinal resins, when flowers are two-thirds to fully open. Harvest the entire flower head, since the greatest concentration of compounds exude from the green sepals at the base of the flower. If you're preparing blossoms for a balm, salve or lotion, wilt or dry flowers before covering in high-quality oil. For cut flowers, harvest blooms when they are about 50% open: they'll open gorgeously the next day. Harvested fully open, their petals often fall within a few days.*

**Succession Sowing:** For continuous blossoms, sow every 3 to 4 weeks until about 8 weeks before first frost in fall. You can sow as late as 4 weeks before first frost and they'll blossom, though not as profusely.

**Companion Planting:** Second only to compact marigolds like Queen Sophia and French Brocade, calendula is one of our key companion plants. Two feet tall and not quite as wide, calendula tucks between taller plants like tomatoes as well as at the ends of beds, attracting beneficial insects like ladybugs, syrphid and hover flies as well as lacewings. Their blooms readily deter many pest insects with abundant carotenoids and can act as a trap crop for aphids, whiteflies and thrips.

**Fertility Considerations:** As a general rule, more nutrients will increase plant health and thus flower production. For all plants, an abundance of nitrogen promotes leafy, vegetative growth and emphasis on phosphorus encourages flowering.



## CULTIVATE

**Weeding:** Calendula is most susceptible to weed pressure as a young plant. Once established, prolific stems form a dense carpet out-competing most weed pressure. Mulching young plants reduces your need to weed and maintains more even moisture.

**Feeding:** Calendula thrives in rich soil and to boost their health & subsequent abundance all the more, foliar feeding and/or root drenching with compost tea and/or dilute fish emulsion every two weeks will go far. Keep in mind that too much nitrogen will inspire more leafy, vegetative growth; increased phosphorus will inspire more flower production.

**Pests:** Snails and slugs can munch young seedlings, especially when plants are surrounded by moist, protective mulch. Diatomaceous earth as well as organically approved Slug-go are ways to deter slugs, though nothing

can replace your courage plucking them (especially for the chickens in your life to devour!) when you see them. Aphids often cluster in the shady, humid environment in calendula's inner leaves, though they don't love the sticky resins coating the stems of more strongly medicinal varieties.

**Diseases:** Come August here in Zone 5, calendula is susceptible to powdery mildew, though not as devastatingly as zucchini or peas. Dive into our blog sharing more about Powdery Mildew biology, prevention and management.

**Season Extension:** Calendula is remarkably cold-hardy, often flowering into December here in Zone 5. Floating row cover over hoops protects calendula from autumn chill, especially if you established your calendula late in the season and are still hoping to harvest abundance.

## HARVEST

**For Edible Flowers:** Once flowers are fully open, pluck delectable petals from their blossoms. Leave the bitter center, calyx and sepals on the stem. Toss each delectable blossom on salads, cakes and everything in between! We dry petals to toss into rice as 'peasant saffron' as well as quiches in winter to add a burst of sunshine. Add their gorgeous petals to herbal compound butters with chives and other delight! We love to toss petals & whole blooms into ice cubes for fun summer drinks & calendula tea is also a welcome dose of sunshine in any season.

**When to Harvest for Medicine:** In early morning, when flowers are two-thirds to fully open, calendula contains the highest concentrations of the most medicinal resins. Harvest the entire flower head, since the greatest concentration of compounds exude from the green sepals at the base of the flower. If you're preparing blossoms for a balm, salve or lotion, wilt or dry flowers before covering in high-quality oil.

**For Cut Flowers:** Blooms harvested when 50% open will open gorgeously in a bouquet the next day. Harvested more open, the petals often fall within a few days.

**For Optimum Plant Health and Blossom Abundance:** Plucking flowers every two to three days will promote the greatest re-growth of your calendula. Once your calendula matures seed, they will resist flowering with the same vigor. Also, as we learned from the fabulous Ger-



*As a general rule, more nutrients will increase plant health and thus flower production. For all plants, an abundance of nitrogen promotes leafy, vegetative growth and emphasis on phosphorus encourages flowering.*

aldine of Suntrap Botanical, rather than simply plucking flower heads, follow each flower down its stem and harvest the entire stem. Though more effort, this 'pruning' of your calendula allows more light and airflow to stimulate greater flower production.

**A Word to the Wise:** Calendula readily self-sows, becoming a boisterously cramped carpet when their seeds are not saved or dead-headed. Just another great reason to harvest those gorgeously delicious and medicinal blooms, it's true.



## CALENDULA AS MEDICINE



*Food is medicine! Calendula has been part of cuisine, medicine cabinet and ceremony for millennia.*

Calendula has been first-aid medicine for millennia. Topical salves, lotions, balms, poultices, compresses and baths of calendula are anti-inflammatory and vulnerary (promoting wound healing), impressively powerful while gentle enough to heal diaper rash. Calendula is also anti-bacterial, anti-fungal and cleansing of the lymph

system. Typically, calendula heals an incredible array of skin irritations from rashes to stings, abrasions to burns, eczema to bruises. Calendula may be topically applied as an oil, salve or lotion as well as poultice, compress or soak, all helping to reduce pain, infection and swelling.

**Oil Infusion:** Harvest blooms when two-thirds to fully open in the morning, wilting or drying before tucking into a jar and covering with a high-quality oil of your choice. Infuse four weeks in a dark location before straining the blossoms. Our friend Geraldine of Suntrap Botanical taught us to combine calendula with plantain (*Plantago spp.*) and marshmallow (*Althaea officinalis*) to further catalyze healing. Apply your oil as is or make a salve, below.

**Salve:** Over a double boiler, combine one ounce of beeswax for every four ounces of infused oil. Once beeswax has fully liquified and combined, pour into a vessel of your choice to let cool.

**Tea:** Slightly bitter, astringent & full of antioxidants, calendula tea is not popular with American penchants for sweetness and it's quite our loss. It's bright tea cheers up a winter day and a few flowers infuse brilliantly as summer tea while deeply promoting healing in our bodies and spirits.

## SEED SAVING

**Life cycle:** Annual, though calendula readily self-sows when allowed to mature seed.

**Self or Cross-Pollinated:** Cross-pollinated; maintain ½ mile between varieties if you wish them to not cross.

**Wet or dry-seeded:** dry-seeded

**Qualities to select for:** First and always, flavor! We also love to select for earliness, abundance, medicinal compound concentration, disease resistance and plant architecture. What else is important for you, Friend? Select for it!

**When to Harvest:** Once seeds turn from green to gold, harvest seedheads on a dry day and set them in a single layer on a screen with fans in a warm place until crispy dry.

**Seed Cleaning Notes:** Both large and small calendula seeds maintain great vigor, so keep all but the smallest seeds.

**Seed Storage:** Calendula easily holds germination 5+ years (even in your kitchen cupboard!) and for more details, hop on over to our blog, *How Long Do Seeds Last? Fruition's Secrets to Storing Seeds.*



*In humid climates it's crucial to harvest golden dry seeds right away before humidity hastens both seed dispersal and decomposition. Also, when you're drying seeds, use fans to wick excess moisture and though warmth always helps dry seeds quickly, resist exposing them to temperatures above 90°F / 32°C.*



## BEST OF THE BLOG

Fruition's Guide to Companion Planting

Our Favorite Edible Flowers

Ideal Varieties for Container Gardening & Raised Beds

6 Seeds to Sow in Early April

Easy Flowers to Sow Four Weeks Before Final Frost

5 Tips for Gorgeous Transplants

How Long Do Seeds Last? Fruition's Secrets to Storing Seeds

*Enjoy our Seed Starting Academy for step-by-step video tutorials to surround you with abundance.*

Insight & inspiration daily!

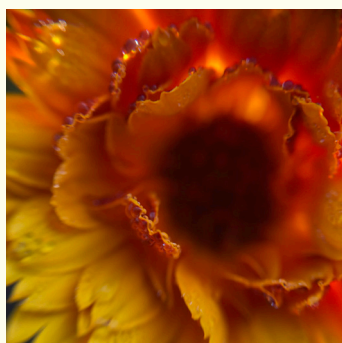


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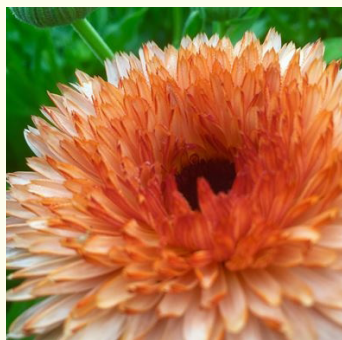
@fruition\_seeds

## OUR VARIETIES:



### ORGANIC SUNSHINE FLASHBACK CALENDULA

With bi-color petals bright yellow-orange on the front and burgundy on the back, Sunshine Flashback is perfect for containers and striking on salads.



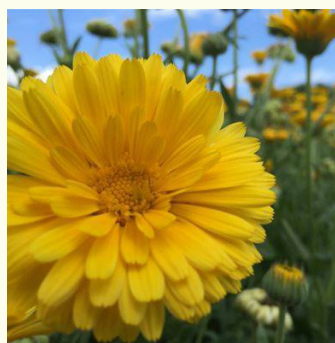
### ORGANIC ZEOLIGHTS CALENDULA

The gorgeously delectable brilliance of Frank Morton. Each edible bi-color petal is cantaloupe-salmon fringed with yellow and burgundy on the back.



### ORGANIC RESINA CALENDULA MIX

Chock-full of deeply medicinal resins, Resina is easy to grow in any season, any soil & any sun, even partial shade. May beauty and abundance surround you for many seasons to come.



### ORGANIC REMEMBRANCE EDIBLE CALENDULA MIX

Here in the Finger Lakes, Remembrance Farm grows calendula to add color and diversity to Nathaniel's signature "Flower Power" salad mix. Fruition has

hand-selected this variety to have a brilliant diversity of colors with dozens of gorgeous, edible petals on each blossom to make adding petals to their salad mix even easier. Enjoy!

## OUR FAVORITE RECIPES

### *Calendula petals:*

~ tossed on salad

~ tossed on cakes and cupcakes

~ cooked with rice as 'pleasant peasant saffron'

~ baked into quiche for a vivid burst of brightness

~ rolled into herbal compound butters

~ dried and added to herbal salts

~ steeped as tea

### *Calendula whole flowers:*

~ frozen into ice cubes

for delightful summer drinks

**PRESERVING THE HARVEST:** *As an edible herb, we dry flowers for winter tea, quiches and rice. We also make medicinal oils and salves for first aid in all seasons.*

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