



G.A.C
GREEN HERBS&ESSENTIAL OILS



DRIED FLOWERS





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G.A.C DRIED CALENDULA FLOWERS

- **HS Codes**

Dried Calendula Flowers: 1211.90.86 (used in perfumery, pharmacy, or insecticidal purposes) .

Fresh Calendula: 0603.19.70 (cut flowers for bouquets) or 1211.90.86 if for herbal use

- **Color:**

Fresh: Vibrant orange or yellow petals.

Dried: Deep orange to brownish-orange, retaining some brightness if properly dried

- **Aroma:**

Mild, earthy, and slightly herbal with a faintly sweet note. Less pungent than anise

- **Flavor:**

Bitter, tangy, and slightly peppery when consumed (used in teas or culinary applications)

- **Texture:**

Fresh: Soft, pliable petals.

Dried: Brittle and crumbly, easily powdered



Chemical Properties:

- **Essential Oil Content:** ~0.1–0.4%, with flavonoids (e.g., quercetin) and triterpenes as key compounds
- **Density/Volumetric Weight:** ~30–50 g/L for dried petals.
- **Drying Loss:** <12% for commercial-grade dried flowers
- **Foreign Matter:** <1% (high-grade calendula is hand-sorted)
- **Total Ash Content:** <10%
- **pH Level:** 5–6 (slightly acidic) for floral extracts



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SHELF LIFE & STORAGE:

- **DRIED CALENDULA:** 2–3 YEARS IN AIRTIGHT CONTAINERS, AWAY FROM LIGHT AND MOISTURE 13.
- **FRESH CALENDULA:** 5–7 DAYS REFRIGERATED; BEST USED IMMEDIATELY FOR PEAK FLAVOR 15.

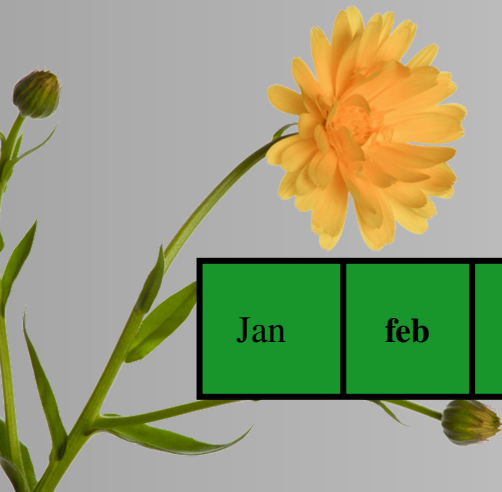
PLANTING & HARVESTING

PLANTING TIME (VP):

- **BEST MONTHS:** SPRING (MARCH–APRIL) OR AUTUMN (SEPTEMBER–OCTOBER) IN TEMPERATE CLIMATES.

HARVEST TIME (H):

- **BEST MONTHS:** SUMMER (JAN –MAR) WHEN FLOWERS FULLY OPEN. HARVEST IN EARLY MORNING FOR PEAK OIL CONTENT .



Jan	feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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G.A.C DRIED HIBISCUS

- **HS Codes**

Dried Hibiscus Calyces: 1212.99.00 (other dried edible flowers/plant parts).

Fresh Hibiscus: 0603.90.00 (fresh cut flowers) or 1212.99.00 if for culinary use.

- **Color:**

Fresh: Bright red or deep magenta petals (calyces).

Dried: Dark red to burgundy, sometimes with purple hues.

- **Aroma:**

Tart, fruity, and floral with cranberry-like notes.

- **Flavor:**

Tangy, tart, and slightly citrusy (used in teas, syrups, and culinary dishes).

- **Texture:**

Fresh: Fleshy, slightly crisp calyces.

Dried: Leathery and brittle, rehydrates easily in liquids.



Chemical Properties:

- **Essential Oil Content:** Minimal (primary compounds are organic acids like citric, malic, and hibiscus acid).
- **Anthocyanin Content:** High (gives red color; ~1.5–2.5% in dried calyces).
- **Density/Volumetric Weight:** ~40–60 g/L for dried calyces.
- **Drying Loss:** <12% for commercial-grade dried hibiscus.
- **Foreign Matter:** <2% (stems/sepal remnants).
- **Total Ash Content:** <8%.
- **pH Level:** 2.5–3.5 (highly acidic due to organic acids).





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G.A.C DRIED HIBISCUS



SHELF LIFE & STORAGE:

- **DRIED HIBISCUS:** 2–3 YEARS IN AIRTIGHT CONTAINERS, AWAY FROM LIGHT AND MOISTURE.
- **FRESH HIBISCUS:** 1–2 WEEKS REFRIGERATED; BEST DRIED OR PROCESSED IMMEDIATELY.

PLANTING & HARVESTING

PLANTING TIME (VP):

- **BEST MONTHS:** WARM CLIMATES: SPRING (APRIL–MAY) AFTER FROST RISK. TROPICAL: YEAR-ROUND.

HARVEST TIME (H):

- **BEST MONTHS:** 6–8 MONTHS AFTER PLANTING (OCTOBER–DECEMBER). HARVEST CALYCES WHEN PLUMP BUT BEFORE HARDENING.

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G.A.C DRIED JASMINE

- **HS Codes**

Dried Flowers: 1211.90 (Medicinal plants) .

- **Colour:**

Flowers: White (most common, e.g., *J. officinale*, *J. grandiflorum*), yellow (*J. humile*), or rare pink (*J. polyanthum*) .

Leaves: Bright green (fresh), dull green (dried).

Essential Oil: Pale yellow to amber (absolute) .

- **Aroma:**

Flowers: Intensely floral, sweet, with hints of fruitiness (*J. grandiflorum*) or tea-like warmth (*J. sambac*) .

Off-Flavors: In beverages, coliform contamination can produce fecal/farmyard notes (indole at high levels)

- **Flavour & Odour:**

Tea Infusion: Floral, sweet, with underlying green/herbal notes (linalool, benzyl acetate) .

Absolute: Rich, heady, with waxy undertones

- **Texture:**

Flowers: Delicate, velvety petals; brittle when dried.

Leaves: Smooth, slightly leathery (fresh); crumbly (dried) .



Chemical Properties:

- **Essential Oil Content:**

- **Concrete:** 0.12–0.3% yield from flowers (varies by species; *J. grandiflorum* \approx 0.26%) .

- **Absolute:** 55–61% yield from concrete .

- **Key compounds:** Benzyl acetate (25–40%), linalool, indole, α -farnesene .

- **Density/Volume Weight:**

- **Absolute:** \sim 0.9–1.1 g/cm³ .

- **Loss on Drying:** \leq 10% moisture for dried flowers .

- **Extraneous Matter:** \leq 2% (stems, debris) .

- **Insects:** Aphids, scale insects (monitor in cultivation) .



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G.A.C DRIED JASMINE

SHELF LIFE & STORAGE:

- **SHELF LIFE:**

DRIED FLOWERS: 12–18 MONTHS (AIRTIGHT, COOL).

ABSOLUTE: 1–2 YEARS (DARK GLASS, 15–25°C) .

- **STORAGE CONDITIONS:**

TEMPERATURE: <25°C.

HUMIDITY: <60% RH.

LIGHT PROTECTION: ESSENTIAL TO PREVENT OXIDATION .

- **CULTIVATION IN EGYPT**

- **PLANTING TIME:** JUNE (POST-HEAT) FOR J. GRANDIFLORUM; MARCH FOR J. SAMBAC .

- **HARVESTING TIME:**

GRANDIFLORUM: JUNE–OCTOBER (PEAK AUGUST–SEPTEMBER).

SAMBAC: MARCH–OCTOBER (EXTENDED WITH MILD WINTERS) .



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