



COCO MARIGOLD[®]

LONG STEMS WITH
Big, Bold
BLOOMS



SAKATA[®]



COCO MARIGOLD®

Specifically grown for cut flower production, COCO Marigold offers long stems and big, bold blooms. This series offers three colors, including the deepest orange on the market. Suitable for tighter space production, especially when disbudded, COCO Marigold offers uniform earliness. The long stem length and double blooms make the series a popular choice.

It's Always a Fiesta
WITH COCO®
CUT FLOWER MARIGOLD!



THE Boldness OF COCO MARIGOLD®



UNIFORM FLOWERING

All three colors flower at the same time.



LONG STEMS

Unpinched- 6" / 15 cm
Pinched- 12" / 30 cm
Disbud- 18" / 45 cm



DOUBLE BLOOMS

Large double ruffled flowers up to 5" / 12 cm in diameter



SHORT FLOWERING WINDOW

One week flowering window



RETAIL APPEAL

Ideal for autumn flower arrangements and the Day of the Dead Celebrations



COCO MARIGOLD®

This gorgeous series offers three colors, including the deepest orange on the market.



COCO DEEP ORANGE
is the **DEEPEST** orange
color on the market!



COCO MARIGOLD®

TYPE	Annual
COMMON NAME	African Marigold
BOTANICAL NAME	Tagetes erecta
SEED COUNT	7,100-9,000/oz. 250-320/gr.
OPTIMUM GERM TEMP	72-75°F / 22-24°C
OPTIMUM GROW TEMP	68-90°F / 20-32°C

PLUG CULTURE 3 WEEKS (200 / 10 X 20 TRAY)

STAGE 1 (DAYS 1-5): Select a well-drained media with a pH between 6.2 and 6.5 to avoid iron toxicity. *Tagetes erecta* (African) is sensitive to iron toxicity at a pH below 5.8, characterized by lower yellow leaves with edge browning/burning. Lightly cover the seeds with medium vermiculite and apply 10-100-foot candles/100-1,000 lux to improve germination. Optimum soil temperature is 72-75°F/22-24°C.

STAGE 2 (DAYS 6-10): Marigolds germinate quickly. After emergence place the plug trays in a well-ventilated greenhouse with up to 2,500 f.c./27,000 lux. Reduce moisture and maintain a day temperature of 70°F/21°C and a night temperature of 65°F/18°C.

NOTE *Tagetes erecta* is an obligate short-day plant. Provide long day conditions (> 14 hours) in the plug stage to prevent pre-mature flower bud initiation.

STAGE 3 (DAYS 11-17): Fertilize at 75 ppm N at least once a week to strengthen the seedlings and promote healthy growth. Watering just before wilt is recommended to avoid excessive growth. One should water thoroughly to prevent high salts. Watering early in the morning allows the foliage to dry thoroughly and prevents potential disease problems.

STAGE 4 (DAYS 18-21): COCO Marigold seedlings develop rapidly and are ready to transplant when they reach 4 inches tall with four true leaves. One can drop the air temp. to 62°F/17°C to hold plug trays for a few days. Avoid temp. below 60°F/16°C as this will invite disease problems. Do not delay transplanting as root-bound plugs reduce crop quality.

FINISHED PRODUCTION

SPACING: GREENHOUSE PRODUCTION

Regular: 5x5" / 12x12 cm
Disbud 4x4" / 10x10 cm

SPACING: FIELD PRODUCTION*

Regular 5x5" / 12x12 cm
Pinch 8x8" / 20x20 cm

*Best grown in single rows with 12-16" / 30-40 cm between rows

TRANSPLANTING: Place the plants slightly deep into the soil as they will root above the stem-soil line. Water immediately as stress severely reduces growth and promotes premature flowering. Transplant on time as overgrown and stressed plants result in less flower production.

BUD PREPARATION: Heavier clay loam soil generally produces larger and greater number of flowers. In lighter, sandy soil, fertility and moisture are more difficult to manage. Work the soil to a depth of 12-20 inches/30-50 cm. prior to planting. Optimum pH is 6.5 to 7.5.

NETTING: Provide support netting to keep the plants straight.

TEMPERATURE: Optimum day temperatures are 79-90°F/26-32°C with nights around 68°F/20°C. Warmer temperatures (65-90°F / 18-32°C) will speed up growth in general from plug stage to finish. Cool night temperatures combined with warm day temperatures promote strong plants and larger flowers.

FERTILIZER: Nutrition levels in the soil should be moderate at the start. A general recommendation of key elements in dry soil at the time of planting is listed below.

Fertilizer	Rate
NITRATE NITROGEN	40-80 ppm
PHOSPHORUS	25-60 ppm
POTASSIUM	250-400 ppm
CALCIUM	2,500-3,500 ppm
MAGNESIUM	300-350 ppm

After transplanting use a well-balanced calcium-nitrate based fertilizer for the first 6 weeks and then finish with a high potassium formulation.

Under-fertilization creates small plants and flowers, while over-fertilization (especially with nitrogen) promotes excessive vegetative growth and fewer flowers. Soil and tissue analysis are the best way to determine if the plants are receiving optimum nutrition. *Tagetes erecta* is very sensitive to a deficiency of calcium and boron. Calcium promotes strong cells and reduces calyx breaking. Boron promotes strong tissue in xylem and phloem. To ensure an adequate supply, calcium and boron may be applied as a spray to the plant starting 10 days after transplant and continuing every 10 days until blooming.

PRE-PLANT FERTILIZER: Incorporating a granular fertilizer, such as 16-20-10, at 300-330 lbs./acre is a common practice in California to improve plant growth, vigor, flower size and yield.

FLOWER DEVELOPMENT: The rate of flower development is related to the day length and temperature. Day lengths of 12 hours* or more are recommended for optimum growth. Short days (< 12 hours) accelerate flower bud development. Under these conditions, the plants will flower earlier on shorter plants, and yields may be reduced. Long days (>12 hours) will slow flower bud development. Under these conditions, the plants flower later on taller plants.

* When the photoperiod is less than 12 hours, light the crop beginning at transplant for 30-40 days or until flower buds appear. Night interruption for four hours (22:00 - 02:00) or day length extension to provide 15 hours of light per day is recommended. Cyclic lighting for 6 hours (21:00 - 03:00) with 15 minutes on and 15 minutes off is also effective.

DISBUD	11-12 Weeks	Space 4 x 4" / 10 x 10 cm.	Day 14, after transplanting, start to remove lateral stipules and keep watching continuously every week until blooming.
PINCH	15-16 Weeks	Space 8 x 8" / 20 x 20 cm.	Day 14-21 after transplanting pinch the tip to leave 4-5 lateral shoots.

All information given is intended for general guidance only and may need to be adjusted to meet individual needs. Cultural details are based on North American conditions and Sakata cannot be held responsible for any crop damage related to the information given herein. Application of recommended growth regulators and chemicals are subject to local and state regulations. Always follow manufacturer's label instructions. Testing a few plants prior to treating the entire crop is best.



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