

## ***Rudbeckia hirta*** ***Prairie Sun***

Cone Flower

### ***Culture guide***

**Uses:**

Plants for border, pot and container plants, cut flower production

**Exposure:**

Sun

**Garden height:**

30" / 75 cm

**Crop time:**

15-18 weeks

**Sow time:**

November for flowering in pots from April onwards; April for flowering in pots from June onwards

**Sowing method:**

2-3 seeds per plug, can be sown directly into final pot

**Germination:**

8-14 days at 68-72 °F (20-22 °C)

**Growing On:**

Transplant plugs into 4.5" (11 cm) or larger pots. Grow on at 60-64 °F (15-18 °C) day temperatures and 50-55 °F (10-13 °C) night temperatures. Feed weekly at 150 ppm nitrogen in a well balanced fertilizer mix.

Lighting: Requires a minimum day length of 14 hours to initiate flowering. Plants that do not receive sufficient day length will form rosettes and flowering will be delayed. Day length extension of greater than 16 hours can cause stem elongation. Light manipulation can be used to control plant growth.

**Media:**

Use a well-drained, growing substrate with 20-30 % clay, 1-1,5 kg/m<sup>3</sup> complete balanced fertilizer, 0-2 kg/m<sup>3</sup> slow release fertilizer (3-6 months), iron-chelate, micronutrients, pH: 5.8-6.2. Field: loamy sandy to sandy humus soils with good drainage and good nutrition levels. Standard fertilization: 80-100 g/m<sup>2</sup> of a slow release fertilizer.

**Temperature:**

Grow at 18-20 °C. *R. hirta* needs warm temperatures for the growth. Temperatures of 16 °C increase the cultivation time by 3 weeks. Temperatures below 16 °C can be a cause for red colouring of leaves. *R. hirta* does not tolerate frost.

**Fertilization:**

Moderate fertilization levels are required. Fertilize the crop weekly with 100-150 ppm nitrogen (at 0 kg/m<sup>3</sup> slow release fertilizer in substrate), using a potassium balanced fertilizer (N: K<sub>2</sub>O-ratio: 1:1,5). Avoid high ammonium and high nitrogen levels. Prevent magnesium deficiency by applying magnesium sulphate (0,05 %) 1-2 times and in case of iron deficiency (above pH 6.0) apply iron-chelate for 1-2 times. Field: Take care of possible iron deficiency and apply iron-chelate for 1-2 times. N min soil value: approximately 130 g N/m<sup>2</sup>.