

Additional Notes on *Chrysothamnus*, *Ericameria*, and *Gutierrezia*

1a. Head radiate, with petal-like flowers at edges of capitula (sun flower heads) these conspicuous when in flower, sometimes drying and persisting on phyllaries; achenes of, often deciduous, scales.

Gutierrezia sarothrae. Plants seldom more than a half meter tall. Woody only at base. Involucre 3-5 (6) mm tall, disk flowers 3-6, the 8-14 bracts not all aligned. Achene body 0.8–0.2 mm long.

1b. Heads discoid, with only narrow long tubular symmetrical flowers, no petal-like flowers at the edges of capitula (sun flower heads) when in flower; achenes of narrow bristles.

2a. Twigs covered with densely matted soft hairs, these oftentimes so thick they escape observation.

Ericameria nauseosa. Plants generally to 1.5 meters. Involucre 7-14 mm tall, disk flowers 4-6, corolla 6.5-11 mm long, the 20-25 bracts aligned in vertical ranks. Achene body 3-8 mm long, pappi 3-13 mm.

2b. Twigs hairless to variously hairy, but never densely matted.

3a. Phyllaries, the sterile bracts surrounding the sun flower head, with long narrow occasionally recurved section at their ends; leaves flat

Chrysothamnus Greenei. Plants generally < than 0.5m. Involucre 4-8 mm tall, disk flowers 4-5, corolla 4-6 mm long, bracts loosely aligned in vertical ranks. Achene body 5-7 mm, pappi 7-9 mm.

3b. Phyllaries with blunt tips or often coming to a point at their ends, not with a prolonged linear portion; at least some leaves twisted to turned, the leaves not laying nearly entirely within a single geometric plane.

Chrysothamnus viscidiflorus. Plants generally less than half a meter. Involucre 4-8 mm tall, disk flowers 4-8, corolla 4.5-6.5 mm long, bracts well aligned in vertical ranks. Achene body 2.5-4.2 mm long, pappi 3.5-6 mm long.