

Parapholis incurva (L.) C. E. Hubb., CURVED SICKLE GRASS. Annual, halophytic, fibrous-rooted, several-many-stemmed at base, cespitose, branching from most cauline nodes, decumbent to ascending, to 35 cm tall; shoots with basal leaves but mostly cauline leaves, slender, glabrous. **Stems (culms):** cylindric, to 1.5 mm diameter, typically purplish at nodes, wiry, internodes 20–65 mm long; internodes hollow. **Leaves:** alternate distichous, simple with sheath; sheath open, < internodes, 5–13 veined (5–7 on basal leaves), the veins of basal and lower cauline leaves sometimes conspicuously wavy, without lobes (auricles) at top; ligules membranous, ± truncate, 0.3–1.5 mm long, jagged or toothed; blade linear, typically 12–65 × 1–1.5(–3) mm, the widest at base, flat but when stressed becoming upwardly inrolled, minutely toothed on margins, parallel-veined with principal veins raised on both surfaces, upper surface minutely scabrous. **Inflorescence:** spikelets, terminal, spikelike, of alternate distichous spikelets sunken into cavities of rachis internodes, to 150 mm long, of several–22 spikelets, jointed and breaking horizontally at nodes into segments (rachis subunit + spikelet with persistent, appressed glumes), slightly compressed side-to-side, curved (slightly thicker on outer edge of curve), in range rarely twisted, spikelet with 1 floret, bracteate, glabrous, lacking awns; flag leaf sheath concealing peduncle and the lower 1–5 spikelets; peduncle slender, typically < 15 mm long; rachis internodes 3.5–7.5 mm long, green and white streaked with white areas soon becoming rose or reddish. **Spikelet:** bisexual; **glumes** 2, equal or subequal (to 0.6 mm difference in length), both positioned on outer side of spikelet and concealing floret, slightly overlapping at base and along inner margins, lanceolate, 3.8–7.3 mm long (within sheath lower spikelets often shorter and sterile), to 2.5 mm > internode, stiff (not hard), acuminate at tip, scabrous on outer margins near tip, membranous on margins and infolded on outer margins, typically 4-veined; terminal spikelet free (without continuation of rachis), having 2 distichous glumes to 8.5 mm long; **lemma** membranous, 3.5–4.5 mm long, acuminate at tip, with only midvein raised; **palea** 3–3.7 mm long, rounded on back (not keeled), wrapped around flower, acuminate and finely 2-toothed at tip, 2-veined. **Flower:** bisexual, cleistogamous; **perianth (lodicules)** 2, narrowly ovate, 0.7–1.1 × 0.3 mm, colorless, fleshy at base (not bulbous); **stamens** 3, free, included; filaments threadlike, 2.5–3.7 mm long, whitish; anthers basifixed, dithecal, 0.5–0.8(–1.3) mm long, pale yellow, arrow-shaped at base, longitudinally dehiscent; pollen pale yellow; **pistil** 1; ovary superior, club-shaped, 0.8–1.4 × 0.4–0.6 mm, pale green, glabrous, 1-chambered with 1 ovule; styles 2, included, spreading, 1–1.4 mm long, clearly separated at top of ovary, pale green, feathery (plumose) with colorless hairs. **Fruit:** achene (caryopsis), in rachis cavity hidden behind glumes, oblong-lanceoloid, 2.5–3.6 × 0.7 mm, olive brown to brown, triangular in ×-section, acute at base, blunt at tip, tightly enclosed by lemma and palea; rachis internode attached to radicle after germination. Early May–late June.

Naturalized. Halophytic annual growing at Pt. Mugu above the highest tide line behind salt marsh. *Parapholis incurva* is one of several grass species in range having a rachis that breaks into one-spikelet segments, hence is often called jointed. The dispersal unit is very tough and remains intact. During germination, the radicle and subsequent adventitious roots grow into the surrounding soil, but the rachis subunit persists, so when the plant is extracted, the old structure can be seen.

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