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### Morphological Features of Parasitic Angiosperm *Cuscuta japonica* Choisy

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Some morphological features of *Cuscuta japonica* Choisy were observed at different developmental stages. The seeds treated with concentrated sulphuric acid were germinated in the dark and at 30°C in an incubator. The embryo of this plant was devoid of cotyledons, a yellow, doubly coiled with a tapering apex and a blunt massive radicle. In 3-day-old seedlings the shoot tips were slightly hooked and the radicles showed a circular or half-circular form. 3-day-old seedlings without host plant were incubated at 30°C and controlled light conditions. The green shoot tips of 6-day-old seedlings were slightly hooked, while in the 8-day-old seedlings the green tips were completely hooked and the radicles degenerated. When the 6-day-old *Cuscuta* seedlings were contacted with the host plant (*Impatiens balsamina* L.) the seedlings' shoot tips entwined the host stem. At this time the mid-cortical cells of the seedling tip dedifferentiated and divided. Finally the upper haustorium that lies external to the host organ was formed. With haustorial maturation, an endophyte primordium, which invades the host tissues, developed within the haustorium. The endophyte primordium consisted of two distinct cell types: elongated digitate cells with very dense cytoplasm and large nuclei at the central region and small file cells with prominent nuclei proximal to the digitate cells. The tip cells of endophyte penetrated the host tissues and reached the host vascular tissues. The *Cuscuta* stem developed after the first haustoria matured spirally entwined the host. Some branches of *Cuscuta* stem showed a self-parasitism. When the *Cuscuta* stem entwined a dead plant stem, the endophyte did not develop.

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