Energy storage substances of cuscuta

What are the chemical components of Cuscuta?
Cuscuta species contain different groups of chemical constituents, as flavonoids and glycosides, alkaloids, fatty acids, steroids, terpenoids, fixed oil, minerals, essential oil and others phytomolecules.

What molecule does Cuscuta take up?
In addition to small molecules such as water and photosynthates,Cuscuta takes up macromoleculesincluding nucleic acids,and even pathogens such as viruses and phytoplasmas (Table 1). Although many aspects of this interaction have been studied,precise mechanisms regulating macromolecule transmission remain unclear. Table 1.

Is Cuscuta a plant or plant?
Cuscuta species have been reported to contain several phytoconstituents including flavonoids, glycosides, alkaloid, tannins, lignins and other organic substances. Besides them also conatins essential oil and trace elements. Traditionally the herbs and their extract (commonly C. chinensis, C. reflexa) are being consumed by human population.

How does Cuscuta haustorium elongate?
The Cuscuta haustorium initiates in the parasite stem from cortical and epidermal cells that expand to form a lateral protuberance,variously termed the upper haustorium,adhesive disk or pseudohaustorium,which elongates toward the host stemand adheres by means of excreted pectinaceous 'cement' material [9,10].

Why is Cuscuta a good subject?
Cuscuta has many characteristics of an ideal subject for studying plant-plant interactions. Starting as a seedling it exhibits sophisticated mechanisms for locating a host,integrating into host tissues,and extracting host nutrients.

Are Cuscuta plastids photosynthetic?
Cuscuta species are holoparasitic on their hosts and although some species synthesize chlorophyll,others have lost extensive portions of their plastid genomes so as to be functionally nonphotosynthetic. The plants are unusual in many other ways as well.

Abstract: Seed germination is the beginning of plant life, and this process requires the mobilization of various storage materials to provide nutrients and energy. Therefore, storage materials are ...

Energy storage substances such as starch, glycogen, and oligosaccharides play critical roles in the survival and metabolic processes of organisms. Starch, primarily found in ...

The difference between the total construction cost and the construction cost of the storage substances may be

considered as the construclion COSI of the non-storage substances which ...

Let"s start with a fun fact: Your body right now contains enough biological energy storage substances to power a small lightbulb--talk about being literally electric! Whether you"re a ...

Considering the ubiquitous presence of Cuscuta and the translocation of various substances during parasitization, Cuscuta is a key plant for studying host-parasite plant ...

Abstract Background: Cuscuta pedicellata and some of its isolated compounds were suggested previously to have an anti-obesity effect in rats. This study aimed to investigate the effect of ten ...

Storage starch, synthesized in the seeds, tubers, corms, and roots of plants, is the main substance used by plants to store carbohydrates and is the most important energy source for ...

When we investigated the seasonal trends of storage substances and their energy contcnts in mediterranean woody plants (DLUIANTOGLOU & KULL 1982) it proved to be necessary to ...

Abstract Cuscuta australis (C. australis) seed and stem are historically used by the local population as dietary supplement for the management of infertility. This study, ...

The vast seeking of energy and lacking of fossil fuels has concerned adequate attention of investigators to advance materials, including outstanding electrochemical ...

Plant polysaccharides with antidiabetic activity have been discovered in various natural plants, which include various biological functions such as energy storage, cell wall ...

Isolated compounds from Cuscuta pedicellata ameliorate oxidative stress and upregulate expression of some energy regulatory genes in high fat diet induced obesity in rats.