In smallholder farming in East Africa, intercropping of maize with the cattle forage legume, *Desmodium uncinatum* Jacq., prevents parasitism by *Striga hermonthica* (Del.) Benth. witchweed) through an allelopathic mechanism. Isoschaftoside, a di- *C*-glycosylflavone, isolated from the root extract and root exudate of *Desmodium*, interferes with *in vitro* radicle development of germinated *Striga*. The biosynthetic pathway of this class of compound is already mostly present in edible legumes and in cereals, so characterisation of the enzyme and genes that control *C*-glycosylflavone biosynthesis has the potential to create this protection mechanism in other agriculturally important plants.