Cleptoparasitism is a widespread life strategy in bees (Hymenoptera: Apoidea), with more than 15% obligately parasitic bee species (2500 species; Michener 2007). We can find cuckoo bees in four of the seven bee families and it evolved several times independently (Michener 2007). However, origin and evolutionary steps leading to the cleptoparasitic life strategies in bees are poorly understood. There are currently a number of descriptive publications about mode of parasitism of cuckoo bee species (presented largely in the works of Jerome G. Rozen Jr.). No surprise, when cuckoo behaviour is the most obvious strategy showing unusual adaptive morphology and coloration. However, but this is just one of the cleptoparasitic strategies. Field (1992) published a valuable review about intraspecific cleptoparasitic behaviour in Hymenoptera, but a comprehensive analysis and review of all the cleptoparasitic strategies and their evolution is still lacking.

When considering the widest definition of cleptoparasitism (Iyengar 2007), the cleptoparasites utilise any investment of their hosts (source, energy, time). There are several kinds of cleptoparasitic strategies in aculeate Hymenoptera, including bees (Table 1). However, only brood parasitism and robbing are known to be obligatory strategies (Michener 2007). The other strategies are known to be alternative life tactics on the intraspecific level. Diversity of strategies has been described in wasp taxa (Crabronidae, Sphecidae, Vespidae) many times (see Field 1992). All kinds seem to be present in bees as well, however they have been known only in a few documented cases.

Table 1: Dividing of cleptoparasitism in bees to the evolutionary distinct strategies; modified from Field (1992)

cleptoparasitism:	theft of provision:	robbing (= inside nest theft)
-	-	outside nest theft
-	usurpation:	nest usurpation

-	-	nesting area usurpation
-	-	discarding (= nest usurpation after host cell removed)
-	brood parasitism:	cuckoo behaviour (= nest parasitism)
-	social parasitism:	usurpation + brood parasitism + social behaviour