新东方背诵文选80篇:62植物拟态MimicryinPlants PDF转换可能丢失图片或格式,建议阅读原文

https://www.100test.com/kao_ti2020/207/2021_2022__E6_96_B0_E 4_B8_9C_E6_96_B9_E8_c96_207307.htm 62 Mimicry in Plants Plant adaptations can be remarkably complex. Certain species of orchids, for instance, imitate female bees, other plants look and smell like dead animals, and still others have the appearance of stones. These strange adaptations to life represent just a few of the sophisticated means by which plants enhance their chances of survival. Mimicry in plants or animals is a three part system. There is a model: the animal, plant or substrate being initiated. There is a mimic: the organism that imitates the model. And there is a signal receiver or dupe: the animal that cannot effectively distinguish between the model and the mimic. Mimetic traits may include morphological structures, color patterns, behaviors or other attributes of the mimic that promote its resemblance to a model. That model may be either an unrelated species or an inanimate object, such as the background against which an organism spends most of its time. Mimicry is not an active strategy on the part of an individual plant. flowers do not deliberately trick or deceive animals into visiting them. Mimicry arises as the result of evolution through natural Oselection and the occurrence of random genetic mutations that lead over many generations to the appearance of favorable characteristics. If such traits help to camouflage a plant, for example, the plant is likely to have a survival advantage over other plants that are less well camouflaged. The plant will leave more descendants,

thereby passing the advantage to the next generation. For natural Oselection to favor the evolution of mimicry, the mimicry must derive a reproductive advantage from modeling itself after another organism or object: its fitness, measured as the number of offspring produced that survive into the next generation, must be increased as the result of deception. 植物拟态植物的适应性极为复杂。 某种 兰花模仿雌蜂,还有些植物看上去或嗅起来象死去的动物, 更有些植物具有石头的外表。 这些稀奇古怪的适应性不过是 植物的众多求生手段中的一小部分罢了。 动植物的拟态包括 三方面的内容:一是被模仿者,动物,植物或是生态基层, 二是模仿者,即那些去模拟其它东西的生物,三是上当受骗 者,即不能分辨模仿者与被模仿者的动物。 被模仿特征包括 形态结构,色彩花纹,动作习性或其它模仿者实现它与被模 仿者相似的特点。 被模仿者可以是其它种类的生物或非生命 物,如栖居地的环境。 拟态并非某个植物主动的策略。 花朵 并非故意诱骗动物来访。 拟态是无数代自然选择和遗传变异 的进化而获得的有利特征的结果。 比如 , 有些特征有利于伪 装,那么具有这些特征的植物就比不具有的易于生存。 这种 植物就会有更多的后代,并把这些特征代代相传。要让自然 选择惠顾模仿者的进化,模仿者必须在模仿其它生物或物体 中得到繁殖优势:它的适应能力,以存活至下一代的幼兽的 数目来衡量,必定因为欺骗而加强了。 100Test 下载频道开通 ,各类考试题目直接下载。详细请访问 www.100test.com