

研究论文

西双版纳尚勇亚洲象的食物组成与取食生态

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收稿日期 2004-11-3 修回日期 2005-4-2 网络版发布日期: 2006-2-25

摘要 于1998~2000在西双版纳国家级自然保护区尚勇保护区的自然生境中, 通过对亚洲象取食植物调查和粪便分析, 了解亚洲象的食物组成与取食习性。结果显示, 野外跟踪调查共记录有106种植物被亚洲象所取食, 其中有83种出现在象的粪便中, 这些种类分别属于: 禾本科8种(10.0%)、桑科7种(9.9%)、蝶形花科4种(8.4%)、五加科3种(6.6%)、葡萄科3种(5.7%)、夹竹桃科3种(4.6%)、芭蕉科1种(4.2%)、姜科3种(3.7%)、紫金牛科3种(3.6%)、蔷薇科3种(3.6%)、大戟科5种(3.3%)、榆科2种(3.0%)、含羞草科4种(2.9%)13个植物科。根据食物中所占的比率, 桑科的榕属(*Ficus*)、禾本科的竹类(*Bambusoideae*)、小果野芭蕉(*Musa acuminata*)和莠竹(*Microstegium ciliatum*)是亚洲象的主要食物资源。在觅食过程中, 亚洲象取食包括乔木、藤本灌木和草本等各种生活型的植物, 其中先锋种所占比率(59%)高于后续种; 选择性啃食枝条的植物种类(77种)高于牧草式取食的种类(6种)。亚洲象取食植物种类的月变化与月平均温度和月降雨量成负相关, 旱季取食植物种类高于雨季。本研究对制定保护区野生动物管理策略, 以及解决保护区周边日趋恶化的人象矛盾, 具有一定的参考价值。

关键词 [亚洲象](#); [食物结构](#); [粪便分析](#); [取食方式](#); [人象矛盾](#)

分类号 [Q958.1](#), [Q959.845](#)

Diet composition and foraging ecology of Asian elephants in Shangyong, Xishuangbanna, China

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Abstract Diet composition and foraging ecology of Asian elephant were studied in its natural habitat in Shangyong National Natural Reserve, Xishuangbanna, China, through field observation and dung analysis, from 1998 to 2000. A total of 106 species were recorded as being eaten by Asian elephants, among them 83 species were identified in elephant's dung. Plant families that contributed a major proportion of elephant's diet in the study area were: Gramineae (8 spp., 10.0%), Moraceae (7 spp., 9.9%), Papilionaceae (4 spp., 8.4%), Araliaceae (3 spp., 6.6%), Vitaceae (3 spp., 5.7%), Apocynaceae (3 spp., 4.6%), Musaceae (1 spp., 4.2%), Zingiberaceae (3 spp., 3.7%), Myrsinaceae (3 spp., 3.6%), Rosaceae (3 spp., 3.6%), Euphorbiaceae (5 spp., 3.3%), Ulmaceae (2 spp., 3.0%) and Mimosaceae (4 spp., 2.9%). The most important plants in elephants' diet are *Ficus* spp. (Moraceae, 9.0%), *Dendrocalamus* spp. (Gramineae, 4.5%), *Musa acuminata* (Musaceae, 4.2%), *Microstegium ciliatum* (Gramineae, 3.5%) and *Amalocalyx yunnanensis* (Apocynaceae, 3.1%). Asian elephants consumed a variety of plants in terms of life form, including tree, vine, shrub and herb. Early successional species comprise a higher proportion of diet than late successional plants (42 spp. taking 59% vs. 32 spp. taking 37%). Browse species contributed a larger proportion of diet compared to grazing species (77 spp. taking 91% vs. 6 spp. taking 9%). The number of plant taxa (species, genus, family) in elephant's diet each month is negatively correlated with monthly rainfall and mean temperature. The study may help to develop proper strategies for wildlife management especially referring to the human-elephant conflict, which is now a serious issue in the conservation of Asian elephants in this area.

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Key words [asian elephants](#) [diet composition](#) [dung analysis](#) [foraging type](#) [human-elephant conflict](#) [Southwest China](#)

DOI

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