[1]张敏,刘东明.长白山林区落叶松林可燃物模型及火行为状况[J].自然灾害学报,2007,02:127-132.

ZHANG Min,LIU Dong-ming.Fire behavior model and situation of Larix olgensis combustibles in forest zone of Changbai Mountain [J].,2007,02:127-132.

点击复制

导航/NAVIGATE
本期目录/Table of Contents
下一篇/Next Article
上一篇/Previous Article

工具/TOOLS
引用本文的文章/References
下载 PDF/Download PDF(854KB)
立即打印本文/Print Now
推荐给朋友/Recommend

统计/STATISTICS
摘要浏览/Viewed 47
全文下载/Downloads 29
评论/Comments

长白山林区落叶松林可燃物模型及火行为状况(PDF)

《自然灾害学报》[ISSN:/CN:23-1324/X] 期数: 2007年02期 页码: 127-132 栏目: 出版日期: 1900-01-01

Title: Fire behavior model and situation of Larix olgensis combustibles in forest zone of Changbai Mountain

作者: 张敏; 刘东明
武警警种指挥学院, 北京102202

Author(s): ZHANG Min; LIU Dong-ming
The Command University, Chinese Armed Police Force, Beijing 102202, China

关键词: 森林可燃物; Rothermel模型; 可燃物模型; 潜在火行为

Keywords: forest combustibles; Rothermel Model; combustibles model; potential fire behavior

分类号: S762

DOI: -

文献标识码: -

摘要: 在长白山林区不同龄级的落叶松林处设置样地,在样地上设置小样方。采集每个小样方内的死草、活草、凋落物层、半分解层以及1 hr,10 hr,100 hr的杂乱物和灌木,做了可燃物参数的测定。利用Rothermel模型对落叶松林可燃物的蔓延速率、单位面积的热量、火线强度、火焰长度和最大可靠风速进行了计算,得到了比较满意的结果。根据火行为状况,制定了相应的火灾扑救对策。

Abstract: Sample plots with different age of Larix olgensis forest in Changbai Mountain and small sample quadrates in every sample plot were set up.In every quadrats,dead grass,living grass,litter layer,half-decomposed layer,1 hr ruderal,10 hr ruderal,100 hr ruderal and brush were collected and their combustibles parameters were determined.Rate of spread,heat per unit area,fireline intensity,flame length and maximum reliable wind speed of Larix olgensis combustibles were computed with Rothermel Model.The result is satisfactory.According to fire behavior situation the fire suppression tactics are drawn up.

参考文献/REFERENCES

[1] 高国平,等.森林可燃物研究综述[J].辽宁林业科技,1998(4):34-35.
[2] 骆介禹.燃烧能量学[M].哈尔滨:东北林业大学出版社,1992.
[3] 舒立福,等.森林可燃物可持续管理技术理论与研究[J].火灾科学,1999,8(4):18-24.
[4] Andrews.Charts for interpreting wild land fire behavior characteristics.Gen.Tech.Rep.INT-131.Ogden,UT:U.S.Department of Agriculture,Forest Service[J].Intermounta in Forest and Range Experiment

Station,1981:21.
[5] Burgan.BEHAVE:fire behavior prediction and fuelmodeling system-FUEL subsystem.General Technical Report INT-167.Ogden,UT:U.S. Department of Agriculture,FS[J].Intermounta in Forest and Range Experiment Station.1984:126.

备注/Memo: 收稿日期:2006-18-20;改回日期:2007-3-24。
基金项目:中国人民武装警察部队攻关课题
作者简介:张敏(1971-),女,副教授,博士,主要从事森林防火研究.E-mail:yanglei@sasac.gov.cn