ASIC 2014
COLOMBIA

THE 25TH INTERNATIONAL CONFERENCE ON COFFEE & SCIENCE

September 8th - 13th, 2014

LEVERAGING KNOWLEDGE FOR COFFEE SUSTAINABILITY

Federación Nacional de Cafeteros de Colombia

ASIC
ASSOCIATION FOR SCIENCE AND INFORMATION ON COFFEE

The web-based system implementation improved data organization, fellowship program organization, technical monitoring, document archiving, reduced time, as well as costs and paper usage, rationalizing the use of resources and contributing to the environmental sustainability. Last year the system has received 359 fellowships applications allocated in 168 research projects of 27 institutions in 9 Brazilian states. Finally, we may conclude that the web-based system has achieved its goal, providing availability, information quality and ensuring adequate support for coffee research through the appropriate use of Information Technology - IT.

PA210 ENVIRONMENTAL DEGRADATION IN COFFEE PRODUCING FARMS OF SOUTH MINAS GERAIS

BORÉM, Rosângela A. T.*, SILVA, Laís de O.*, VOLPATO, Margarete M. L. ALVES, Helena M. R.***, VIEIRA, Tatiana G. C.**, BORÉM, Flávio M.*, CARVALHO, Ronan N.*, TARTARINI, Luis A. F.***

Universidade Federal de Lavras, Lavras, MG, BRAZIL. **Empresa de Pesquisa Agropecuária de Minas Gerais – EPAMIG, Lavras, MG, BRAZIL. * Empresa Brasileira de Pesquisa Agropecuária – EMBRAPA/CAFÉ, Brasília, DF, BRAZIL.*

Essentially with increasing human population, many forests have space lost to agriculture and urban buildings. The water, essential to the survival of living beings, has its production and maintenance directly related to the presence of forests. Areas for Permanent Preservation (APPs) have an essential role to protect and conserve water resources. Highlighting, the delimitation of these areas are needing and apparently one of the instruments for this study is the use of geotechnologies. We evaluation the APPs in São Lourenço city, South of Minas Gerais State, Southeast Brazil, important city renowned for the quality of the springs of mineral water, and we compare it with the map of land use with the goal to obtain the level of conservation/ degradation this site. For processing the data, we created the map of land use through the ENVI 4.7 software, we were used RapidEye images from 2012, with a 5m spatial resolution. Five classes of land use were created: Coffee, water, forest, urban areas and other uses. The ArcGIS 9.3 software was used for the delimitation of APPs and crossing data. Through these data, we generated Digital Elevation Model Hydrologically Consistent (MDEHC) with application of refinement to eliminate false depressions. The delimitation of APPs was conducted in according to Brazilian Forest Code (Federal Law No. 12.727/2012). We studied three classes of APPs: Springs, river banks and hill tops. The results suggest that on a total area of 5797ha oh city, 29.1 % or 1,688 ha these area should be delimited as APPs. Moreover, the analysis of land use found that the APPs total should be 71.5 %, however these sites degraded by other uses. It can be stated that 70 ha of Coffee area, 24 ha or 34.2 % , were in APPs. Urban area has 878 ha, of which 14.9% or 131 ha also occupying APPs; and 3,656 ha for other types of land use, it is in APPs 28.8 % or 1053 ha. The methodology indicated to be effective to determine the rates of degradation of APPs, with respect to each type of land use, and thus contribute to studies and policies that may try to reverse this situation of resource depletion and maintain the quality hydro mineral of region.