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ABSTRACTS

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Edited by H.E. Bigelow & E.G. Simmons

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CLASSIFICATION OF TROPICAL FORESTS ON THE BASIS OF THEIR FOLIICOLOUS
LICHENS. FIRST DATA FROM CENTRAL AFRICA.

Sérusiaux, E., Département de Botanique, Université de Liège, Sart Tilman,
B-4000 Liège, Belgium

The study deals with a first attempt of establishing a classification of tropical forests on the basis of their foliicolous lichens. The material used is an important collection made in various biotopes in Central Africa : tropical rain forest at low and high altitudes, xerophilous forests in the savannas as well as riverine forests.

Identification of the lichens found on both sides of the leaves leads to a list of taxons growing in each locality and to a floristic index for each forest prospected. It can be used as an indicator of secondary regrowth of the forest (number of species gets lower if the forest has been cut down several times or has gone through severe disturbances).

An abundance index has been used to outline the foliicolous vegetation. Computer analysis has been carried out on those data using factor analysis (more precisely a method commonly used in France and named "analyse des correspondances"). If applied to sets of leaves collected in the same kind of forest (e.g. upland forest) the method allows the delimitation of different associations of foliicolous lichens and stresses the influence of altitude on foliicolous vegetation. If applied to sets of leaves from different kinds of forests the method leads to an ecogeographic comparison of them. For example, foliicolous lichen vegetation of the upland forest at 1900-2000 m elevation appears to be very close to that of riverine forests at 1500-1750 m.

However one must keep in mind a possible host specificity or at least a link between foliicolous lichens and a definite kind of leaves. Further studies are required to be able to insert that element in the analysis.