

Zeitschrift: Veröffentlichungen des Geobotanischen Institutes der Eidg. Tech. Hochschule, Stiftung Rübel, in Zürich
Herausgeber: Geobotanisches Institut, Stiftung Rübel (Zürich)
Band: 67 (1980)

Artikel: Die ökologische und pflanzensoziologische Stellung der Eibe (*Taxus baccata*) in der Schweiz = The ecological and phytosociological situation of the yew-tree (*Taxus baccata*) in Switzerland
Autor: Leuthold, Christoph
Kapitel: Summary
DOI: <https://doi.org/10.5169/seals-308589>

Nutzungsbedingungen

Die ETH-Bibliothek ist die Anbieterin der digitalisierten Zeitschriften auf E-Periodica. Sie besitzt keine Urheberrechte an den Zeitschriften und ist nicht verantwortlich für deren Inhalte. Die Rechte liegen in der Regel bei den Herausgebern beziehungsweise den externen Rechteinhabern. Das Veröffentlichen von Bildern in Print- und Online-Publikationen sowie auf Social Media-Kanälen oder Webseiten ist nur mit vorheriger Genehmigung der Rechteinhaber erlaubt. [Mehr erfahren](#)

Conditions d'utilisation

L'ETH Library est le fournisseur des revues numérisées. Elle ne détient aucun droit d'auteur sur les revues et n'est pas responsable de leur contenu. En règle générale, les droits sont détenus par les éditeurs ou les détenteurs de droits externes. La reproduction d'images dans des publications imprimées ou en ligne ainsi que sur des canaux de médias sociaux ou des sites web n'est autorisée qu'avec l'accord préalable des détenteurs des droits. [En savoir plus](#)

Terms of use

The ETH Library is the provider of the digitised journals. It does not own any copyrights to the journals and is not responsible for their content. The rights usually lie with the publishers or the external rights holders. Publishing images in print and online publications, as well as on social media channels or websites, is only permitted with the prior consent of the rights holders. [Find out more](#)

Download PDF: 12.12.2025

ETH-Bibliothek Zürich, E-Periodica, <https://www.e-periodica.ch>

Summary

A survey made in 1970 on the distribution of the yew-tree (*Taxus baccata*) in Switzerland shows that this species has decreased considerably since 1904 when a similar survey was made, and that the next tree generation is practically non-existent. The yew-tree maintains a peculiar "in-between" position, i.e. between deciduous tree and evergreen conifer as well as between pioneer and climax tree. Owing to this position and the genetically controlled small height growth the species in question could grow in a large number of ecological niches of our forests as a secondary stand tree.

From a climatic point of view the potential range of the yew-tree covers half of Switzerland. The species can be found in all regions with oceanic to subcontinental climate and which are not subject to heavy winter frosts. Compared to beech with a similar distribution, yew-trees tolerate drier air and do not suffer from late frost. Their range therefore extends further into the continental zones.

At present, however, yew-trees occur in only half of their potential area. Site factors such as local climate, water properties, skeletal and nutrient content of the soil as well as the influence of man were investigated as potential limiting factors within the climatic zone. It was found that parent material of soils and configuration of ground were the only natural limiting factors: marly and unstabilized soils discourage beech. This, together with better light conditions on steep slopes promote the growth of yew-trees.

The 260 vegetation surveys reveal the wide phytosociological and accordingly ecological range of this species. Although the survey confirmed *Taxo-Fagetum* as the association for the area investigated, its range proved to be smaller than previously thought. Many stands containing yew-trees had to be attributed to other associations.

An ecogram has been made as a synthesis of the ecological and phytosociological results, integrating edaphic factors as well as competitive influence of beech and pine. The ecogram shows that the ecological niche of yew-trees is determined by extreme site factors which act physiologically as barriers (mainly hydrological factors) and by ecological conditions (mainly light competition).

However, all these ecological and botanical aspects do not fully explain why the yew-tree is missing from large parts of its potential range. This is in fact due to human influence. The yew-tree has been connected with human civilization for thousands of years. The investigation showed that already early civilizations have caused severe damage to this species. In addition, differences in local forest management systems over the last two centuries have further contributed to the existing pattern of distribution.

The present decline of yew-trees is based mainly on two factors: the conversion of coppice with standards into much darker high forests and the excessive game population density (also due to human influence). Nearly all young yew-trees suffer severely from browsing damage. In conclusion, we can say that the present yew-tree stands should be considered as relicts. Without active measures of protection and promotion in the near future this peculiar tree species will almost certainly disappear completely from Swiss forests with the death of the present tree generation - which would be yet another step towards the growing depletion of nature in our technical civilization.