

Country Report - Austria
for
Activities Related to the Cultivation and Utilization of Poplars, Willows
and other Fast-Growing Trees
2020-2023

prepared for the
International Commission on Poplars and Other Fast-Growing Trees
Sustaining People and the Environment

and its
27th Session

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Vienna, Austria
April 2024

I. Policy and Legal Framework

The general legal setting for the cultivation and utilization of fast-growing tree species in forests in Austria has not changed. A specific regulation by the relevant Government Ministry (Verordnung des Bundesministers für Land- und Forstwirtschaft vom 6. Feber 1978 über raschwüchsige Baumarten, StF: [BGBl. Nr. 105/1978](#)) lists tree species that may be grown under rotation regimes that are shorter than standard forestry practice. These are Douglas-fir (*Pseudotsuga menziesii*), Eastern white pine (*Pinus strobus*), grand fir (*Abies grandis*), common ash (*Fraxinus excelsior*), black alder (*Alnus glutinosa*), birch (*Betula* sp.), poplars (*Populus* sp.), willows (*Salix* sp.) and *Robinia*. The minimum age to cut stands of these species remains unchanged – it is 40 years for Douglas-fir, Eastern white pine and grand fir, 30 years for ash, 20 years for black alder and birch, and ten years for poplars, willows and *Robinia*. These short rotation regimes will rarely be realized in Austria, with the possible current exception of diseased ash stands (ash die-back, *Hymenoscyphus fraxineus*; however, other legal provisions also allow the premature cutting of trees in cases of pest and disease problems).

Cultivation of fast-growing tree species on agricultural land, on the other hand, is only possible when maximum ages are not exceeded. Such stands have to be registered with the authorities within ten years of their establishment, and have to be cut back at least once within 30 years. Re-cultivation for agricultural crop use is then possible (in all other circumstances, such sites would automatically become forest land). Specific regulations for short-rotation cultivation also include minimum distances from other agricultural crops (to avoid their shading), in provincial legislations. In practice, this will limit them to larger fields (but many regions in Austria are still characterized by relatively small and narrow fields with alternate, private owners).

The extent of short-rotation cultivation of poplars and willows continues to further decline in Austria, after the change in EU “greening” regimes in the middle of the past decade. The conversion of permanent grassland is not possible, and missing financial incentives mean that there is no trend reversal.

The Austrian Forest Law and its Annex 1 list species that render a piece of land forest (i.e. land under these species is generally considered forest). A change in this list was discussed in order to include other exotic, fast-growing species (e.g. *Paulownia* species and hybrids), but the new list as effective from 17 November 2023 finally does not include them (they can be used in short-rotation on agricultural lands though). The reason for this discussion was climate change and its consequences for forestry. In some cases, alternatives to existing forest production systems and species are desperately sought, due to recent problems and calamities.

II. Technical Information

1. Taxonomy, Nomenclature and Registration

There were no proposals for registering new cultivars of fast-growing tree species in Austria in the reporting period.

2. Domestication and Conservation of Genetic Resources

There are no tree improvement activities to report.

3. Plant Health, Resilience to Threats and Climate Change

We lack data on these issues. Recent years were again very hot and dry, but as the importance of short-rotation forestry declined in general, no information on health and other threats came up.

4. Sustainable Livelihoods, Land-use, Products and Bioenergy

Nursery practices are mainly unchanged for 'traditional' fast-growing tree species. A few private nurseries continue to propagate *Paulownia* plants for biomass and timber production in the warmest parts of Austria (e.g. www.paulownia.at; www.paulownia.farm; <https://www.energiepflanzen.com/>, <http://www.waldveredelung.at/images/Blauglockenbaum.pdf>). It is unclear whether they propagate from seed or via cuttings (i.e., cloning). Apparently, green houses are tested for securing plant production.

The choice of varieties of *Populus* from nurseries has been enhanced slightly. The National List of approved varieties for forestry use contains the traditional set of cultivars ('Pannonia', 'Kopecky', 'Donk', 'Kamabuchi-1', 'Rochester', 'Oxford', 'Jacometti 75 A', 'I-45/51', 'Muhle Larsen', 'Florence Biondi' and 'Androscoggin'); new additions during the reporting period are 'I-214', 'Koltay', and a set of *Populus nigra* clones selected by BFW and registered under a trade name (Tullner Auslese BFW). The latter ones are useful for natural forest restoration settings. All clones are available from stoolbeds in various nurseries.

III. General Information

1. National Poplar Commission or equivalent organization

There is no Commission in Austria; the author is the National Focal Point. This report and information relies mainly on Forest Inventory data, as well as the yearly Agricultural Reports of the government ministry (Grüne Berichte).

2. Literature

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- Guarino, F., Heinze, B., Castiglione, S., & Cikatelli, A. (2020). Epigenetic analysis through MSAP-NGS coupled technology: the case study of white poplar monoclonal populations/stands. *International Journal of Molecular Sciences*, 21(19), 7393. <https://www.mdpi.com/1422-0067/21/19/7393>
- Tinschert, E., Egger, G., Wendelgaß, J., Heinze, B., & Rood, S. B. (2020). Alternate reproductive strategies of *Populus nigra* influence diversity, structure and successional processes within riparian woodlands along the Allier River, France. *Journal of Hydro-environment Research*, 30, 100-108. <https://doi.org/https://doi.org/10.1016/j.jher.2020.03.004>
- Vanden Broeck, A., Meese, T., Verschelde, P., Cox, K., Heinze, B., Deforce, D., De Meester, E., & Van Nieuwerburgh, F. (2024). Genome-wide methylome stability and parental effects in the worldwide distributed Lombardy poplar. *BMC Biology*, 22(1), 30. <https://doi.org/10.1186/s12915-024-01816-1>

3. Relations with other countries

Nothing to report.

IV. Summary Statistics

It remains to be very difficult to collect reliable data specifically for fast-growing trees in Austria. Statistical data collection in forestry and agriculture is not consistent throughout the years. Figures are not available to the level of detail, and in the requested categories, for the questionnaire table.

While there is no estimate of areas under cultivation for forest uses, **standing stock volume** in 1000 m³ has been estimated by the National Forest Inventory (in forests only) for the 2016-2021 period as follows:

<i>Robinia</i>	2.538 ± 479
birch	6.579 ± 489
black alder	8.898 ± 1.051
grey alder	2.480 ± 356
linden	4.223 ± 557
black poplar	492
hybrid poplar	3.567 ± 930
other poplars	4.561 ± 596
tree willows	2.898 ± 533

other hardwoods

982 ± 196

sum soft hardwoods

33.863 ± 2.010

Wood removals have been estimated as follows, for the same period 2016-2021, in 1000 m³
(changes in brackets):

<i>Robinia</i>	93 ± 31
birch	217 ± 23
black alder	199 ± 31
grey alder	179 ± 23
linden	44 ± 12
black poplar	19
hybrid poplar	131 ± 49
other poplars	154 ± 49
tree willows	96 ± 18
other hardwood	38 ± 18
sum soft hardwood	1.045 ± 203

Sources of information are mainly the National Forest Inventory (BFW; <https://www.waldinventur.at/>), the “Green Report” of the Ministry of Agriculture, Forestry, Regions and Water (<https://gruenerbericht.at/>), and Statistik Austria (www.statistik.at).