

CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES
OF WILD FAUNA AND FLORA



Twelfth meeting of the Plants Committee
Leiden (The Netherlands), 13-17 May 2002

Issues resulting from PC11, not included elsewhere in the Agenda

Review on the genus *Taxus*

CONTRIBUTION FROM ITALY

1. This document has been submitted by the Scientific Authority of Italy.
2. As request by U.S. Scientific Authority, we have wrote a contribute to *Taxus* spp. review underlining the Italian status of *Taxus baccata*.
3. About its inclusion in Appendix II, we think that the high number of cultivars traded in Italy, could be avoid a threat to wild species. Finally, we observe that *T. baccata* is one of the species included in NATURA 2000 stands.
4. However, on the basis of the value of this *taxon* in Europe as relictual tertiary flora, we think very useful, the future discussion about its conservation in field during the Plants Committee.

Division:	<i>Gymnospermæ</i>
Subdivision:	<i>Conipherophyta</i>
Class:	<i>Pinitæ</i>
Subclass:	<i>Taxidæ</i>
Order:	<i>Taxales</i>
Family:	<i>Taxaceæ</i>
Genus:	<i>Taxus</i> L. from ταξος
Common name:	Yew

This genus is widely distributed through the northern hemisphere:

eastern North America: 2 spp.

Pacific North America, Mexico, Europe, northern Africa, western and southern Asia, China, Japan.

- *T. baccata* L. (= *T. communis* Sen.)

Common name. Common Yew, English Yew

Growth. The tree attains maturity about in 30th year. It grows very slowly and attains more than 1000 years of age. Extinction of yews is due chiefly to its slow growth and excessive exploitation of yew wood. It propagated by seeds, cutting and grafting.

Ecology. It has a considerable ecological amplitude. It is well suited to urban conditions, its tolerance to SO₂ is medium.

Distribution. It has a disjunct distribution and it occurs in Europe (Fig.1), Asia Minor, Caucasus and North Africa. It is widely spread in Europe, and is also found in N. Persia and Algeria. In Norway and Sweden, south to Portugal, Spain, the mountains of Algeria, Greece, Crimea and Caucasus. Eastwards it spreads to the Baltic Sea, Estonia and the Carpathians, and westwards to England and Ireland.

Altitudinal distribution is up to 2.000 m in Spain and up to 2.300 m in the Caucasus, and 1.200 m in the Alps. In the Himalayan forests it occurs at 1.800-3.300 m, from Afganistan to Bhutan.



Fig. 1

Distribution in Italy. (Fig.2) Alps, Apennines, Sicily, Sardinia, very rare, but commonly cultivated (Pignatti S., 1998. UTET, Torino). Endangered in Liguria, vulnerable in Emilia-Romagna, Calabria and Sicily; lower risk in Puglia, Basililicata, Sardinia (Conti *et al.*, 1997; Liste rosse regionali delle piante d'Italia. WWF and Società Botanica Italiana, Università di Camerino).



Fig. 2

Syntaxonomy. During Pliocene, Mediterranean mountain vegetation was mostly constituted by evergreen trees and Common yew was one of the most typical elements. In the Southern Apennine, it is clearly joined to *Aquifolium-Fagetum* Gentile 1969, in which the the highest number of relictual tertiary flora occurs.

On Pignatti (cit.) opinion, Sardinian stands of *Taxus* and *Aquifolium* should be conserved. Some central apenninic woods belong to *Taxo-Ostryetum* Ubaldi *et al.* 1987.

Uses. Except the aril, all parts of the tree are poisonous because they contain poisonous alkaloid taxin whose content varies in various individuals, it is used for medicine as carminative, contraceptive, cyanogenetic, emmenagogue, expectorant, pectoral.

It is used for topiary work.

It is often cultivated in the United States (Vidakovic M., 1991. Conifers. Morphology and variation. Graficki zavod Hrvatske, Zagreb). There are numerous varieties.

It works well, is suitable for furniture, parquet-flooring, panneling, gate, fence-posts, mallets, table-tops, candle-sticks and other fancy articles. In ancient times it was the most popular for bows and is still used in archery (Dallimore W. & Jackson A.B., 1948. A handbook of Coniferae includ in Ginkgoaceae. Edward Arnold & Co., London).

Horticultural form (according to Krüssmann, 1972)

- A. Habit columnar or conical (no dwarf forms), needles radially arranged –
 - 3) Needles green: a) Columnar. *Cappenberg*, *Columnaris*, *Davisii*, *Fastigiata*, *Fastigiata Nova*, *Fastigiata Robusta*, *Fastigiata Variegata*, *Fastigiata Viridis*, *Melfard*.
 - b) Intermediate. *Erecta*, *Hessei*, *Imperialis*, *Intermedia*, *Neidpathensis*, *Overeyender*.
 - c) Conical. *Cheshuntensis*, *Handswortiana*, *Ratet*.
 - 4) Needles yellow or yellow variegated: *Beteramsii*, *Erecta Aurea*, *Erecta Aureovariegata*, *Fastigiata Aurea*, *Fastigiata Aureomarginata*, *Fastigiata Aureovariegata*, *Standishii*.
- B. Dwarf forms or radially arranged –
 - 1) Shoots more or less pendulous or curved upwards at the apex: *Contorta*, *Davastonianiana*, *Davastonianiana Aurea*, *Expansa*, *Fisheri*, *Glauca*, *Gracilis Pendula*, *Horizontalis*, *Horizontalis Elegantissima*, *Jacksonii*, *Nissen's Corona*, *Nissen's Kadett*, *Nissen's Page*, *Nissen's Regent*, *Pendula Graciosa*, *Spieckermann*.
 - 2) Shoots neither pendulous nor curved upwards:
 - a) Growth normal, vigorous; no dwarf forms. a.a) Needles up to 1 cm long. *Adpressa*, *Adpressa Aurea*, *Adpressa Erecta*, *Adpressa Pyramidalis*, *Adpressa Variegata*, *Amersfoort*, *Backousii*. a.b) Needles over 1 cm long. a.b.a) Needles yellow. *Linearis*, *Lutea*. a.b.b) Needles yellow, yellow or white variegated. *Albovariegata*, *Argentea Minor*, *Aurea*, *Aureovariegata*, *Barronii*, *Elegantissima*, *Pumila Aurea*, *Semperaurea*, *Summergold*, *Washingtonii*.
 - b) Dwarf forms. b.a) Flat, broad. *Buxtoniensis*, *Cavendishii*, *Procumbens*, *Prostrata*, *Pseudoprocumbens*, *Rapandens*. b.b) Conical. *Compressa*, *Paulina*, *Pygmatea*. b.c) Globose. *Compacta*. b.d) Irregular. *Decora*, *Elastonensis*, *Espacridioides*, *Ericoides*, *Knirps*, *Nana*, *Nutans*.

Conservation status in Europe. Bulgarian Species Conservation Legislation (Hardalova R., 1997; The use of medicinal plants in Bulgaria and their protection. Proceedings of Planta Europa, 2-8 September, 1995, Hyères, France: 184-7

- *T. brevifolia* Nutt. (= *T.b. var. brevifolia* (Nutt.) Koehne; *T. lindleyana* Laws; *T. boursterii* Carr.)

Common name. Pacific Yew, Western Yew

Growth. It is very slow, an age of 250-350 year is often attained (Sprague Sargent C., cit.; Vidakovic M., 1991. Conifers. Morphology and variation. Graficki zavod Hrvatske, Zagreb).

Distribution. Banks of mountain streams, deep gorges, damp ravines, growing usually under large coniferous tree; nowhere abundant but widely distributed, usually in single individuals or in small clumps.

It is native from WN America and has a range from SE Alaska, southward along the coast ranges of British Columbia, Washington and Oregon. Along the coast ranges of California as far south as the Bay of Monterey and along the western slopes of the Sierra Nevada to Tulare County, ranging eastward in British Columbia to the Selkirk Mountains, and over the mountain of Washington and Oregon to the western slope of the continental divide in northern Montana. Altitudinal distribution ranges from sea level to about 2500m. (Sprague Sargent C., 1965. *Manual of the trees of North America*. Dover Publications, INC. New York. Krüssmann G., 1991. *Manual of cultivated Conifers*. Timber Press. INC., Hong Kong; Dallimore W. & Jackson A.B., 1948. *A handbook of Coniferae includin Ginkgoaceae*. Edward Arnold & Co., London).

Hardwoods are not common except on recently disturbed sites or in specialized habitats, such as riparian zones (Barbour M.G. & Billings W.D. eds., 1989. *North American terrestrial vegetation*, Cambridge University Press, U.S.A.)

Uses. Used for fence-posts and by the Indians of the northwest coast for paddles, spear-handles, bows, and other small articles. Occasionally cultivated in the gardens of western Europe, it is introduced into cultivation in 1854 but it is very rare in collections (Sprague Sargent, cit.; Krüssmann, cit.).

IUCN red list. LR/nt

- *T. floridana* Chapm.

Distribution. Native of W Florida. River bluffs and ravines on the eastern bank of the Apalachicola River, in Gladsen County, Florida, from Aspala to the neighborhood of Bristol (Sprague Sargent C., cit.).

IUCN red list. CR B1+ 2C

- *T. canadensis* Marsh. (= *T. b.* var. *canadensis* Gray; *T. b.* var. *procumbens* Loud; *T. minor* Brit.)

Common name. Canadian Yew

Distribution. Native of North America where it occurs from Newfoundland to Virginia, Iowa and Manitoba.

Uses. It is quite rare in cultivation (Vidakovic M., cit.; Krüssmann G., cit.).

- *T. celebica* (Warburg) Li. (= *T. chinensis* (Pilger) Rehd.; *T. mairei* (Lemée et Lévl.) Hu ex Liu; *T. speciosa* Florin)

Common name. Chinese Yew

Distribution. Native of Central and West China. Scattered through Western Hupeh and Szechuen, up to 2000 ft (Dallimore & Jackson, cit.).

Uses. Cultivated mostly in G.B. (Vidakovic M., cit. Krüssmann G., cit.).

IUCN red list. VU D2

- *T. cuspidata* Sieb. et Zucc. (= *T. b.* var. *cuspidata* Carr.; *T. sieboldii* hort.)

Common name. Japanese Yew

Growth. It attains 1000 years of age.

Ecology. A frost-hardy species (Vidakovic M., cit.).

Distribution. Native of Japan, Korea and Manchuria; in Japan it occurs up to 2400m. More common in U.S.A. than *T. baccata*. (Vidakovic M., cit. Krüssmann G., cit.). Although widely distributed in Japan, it is not common in a wild state.

Uses. Include a number of cultivars.

- *T. globosa* Schlechtd (= *T. baccata* ssp. *globosa* (Schlechtd) Pilger)

Distribution. The range of this yew is Mexico and Central America (Vidakovic M., cit.).

IUCN red list. LR/nt

– *T. wallichiana* Zucc.

Common name. Himalayan yew (E)

Distribution. From Afganistan along the Himalayas to Sikkim, Manipur, Khasia at 2300-3300m. (Krüssmann G., cit.).

IUCN red list. LR/nt

CITES Appendices. II: = 470#2.

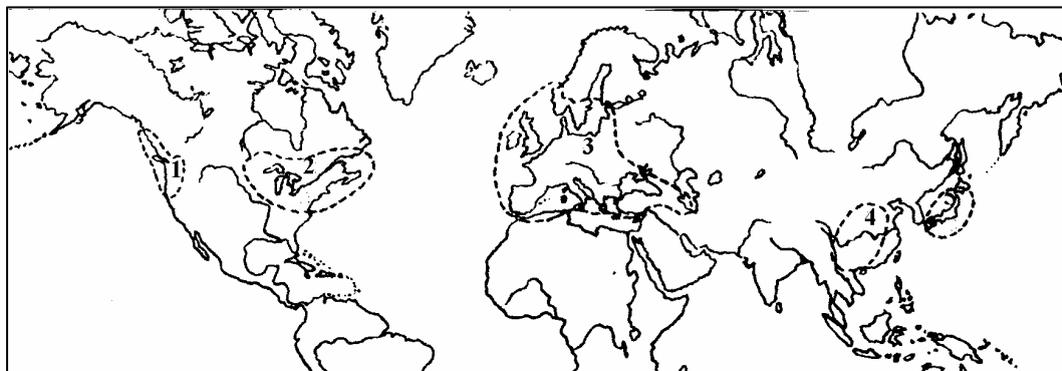


Fig. 1. Range of 1. *T. brevifolia*, 2. *T. canadensis*, 3. *T. baccata*, 4. *T. celebica*, 5. *T. cuspidata*