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We have shown previously that the wood of *Picea obovata* Ledb. contains lignan components [1-4].

The present paper gives the results of an investigation of the phenolic substances of an acetone extract of the wood of *Abies nephrolepis* and *Picea ajanensis* (Yeddo spruce). The substances were separated by chromatography on polyamide powder [water-methanol (90:10)] and on silica gel impregnated with 2% sodium metabisulfite [chloroform-acetone (95:5)]. These compounds also belong to the class of lignans. The components obtained were identified by UV and IR spectroscopy (Table 1) and by the comparison of their physicochemical constants with those of compounds which we have isolated previously from the wood of the Siberian spruce.

The phenols of the wood of the Yeddo spruce, which belongs to the section Casicta, agree in qualitative composition with the phenols of the Siberian and the European spruce [5], which belong to the section Morinda. But the phenolic components of these species of spruce differ in their quantitative compositions. Thus, in the wood of the Yeddo spruce, among the lignans the less-hydroxylated compounds - α -conidendrin, matairesinol, ketomatairesinol, 3,4-divanillyltetrahydrofuran, and pinoresinol - are present in larger amount. In the wood of the Yeddo spruce they make up 56% of the phenolic fraction, and in that of the Siberian spruce only 32%. Matairesinol, hydroxymatairesinol, secoisolariciresinol, liovil, and olivil are also known for the genus *Abies* from the literature.

TABLE 1

Ligans and other phenolic compounds	mp, °C	λ_{\max} , nm	P. ajanensis Fisch.	A. nephrolepis Maxim.
α -Conidendrin	252-253	289, 284, 229 (lg ϵ 3,95 sh. 3,97; 4,37)	+	-*
Matairesinol	72-74	283, 231 (lg ϵ 3,73; 4,08)	+	+
Ketomatairesinol	71-72	310, 283, 233 (lg ϵ 4,29; 4,41; 4,61)	+	-
Hydroxymatairesinol	124-125	283, 232 (lg ϵ 3,99; 4,29)	+	+
3,4-Divanillyltetrahydrofuran	115-116	282, 233 (lg ϵ 3,89; 4,27)	+	+
(+)-Pinoresinol	120-121	281, 233 (lg ϵ 3,91; 4,33)	+	+
Liovil	165-167	282, 232 (lg ϵ 3,89; 4,19)	+	+
Isolariciresinol	112-113	285 (lg ϵ 3,75)	+	-
Vanillin	81-83	310, 280, 230 (lg ϵ 3,69; 3,70; 3,84)	+	+
Vanillic acid	206-207	295; 260 220 (lg ϵ 4,08; 3,83; 3,66)	+	-

*Compounds isolated preparatively are represented by plus signs and those not detected by minus signs.

We are the first to have isolated 3,4-divanillyltetrahydrofuran and pinoresinol from the genus *Abies*.

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