

## TARTU RADIOCARBON DATES X

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The present list includes 74 dates of geologic samples determined using the liquid scintillation  $^{14}\text{C}$  method at the Geobiochemical sector of the Institute of Zoology and Botany, Academy of Sciences, Estonian SSR.

Benzene synthesized from wood of AD  $1850 \pm 10$  served as a reference standard. All radiocarbon dates in BP were calculated using  $5568 \pm 30$  yr as the half-life value of  $^{14}\text{C}$ .

### *Peat bogs of Estonia*

#### **Palasi series**

Palasi bog lies in Rapla Dist, 14km SE of Rapla, and is formed of complex, *Sphagnum fuscum*, *Eriophorum* with *Sphagnum fuscum* and forest sedge peats. At sec a surface layer of ca 1m had been removed by peat manufacturing. Sample coll 1969 by E Ilves and A Sarv.

<b>TA-290. Palasi</b>	<b><math>2170 \pm 70</math></b>
Peat from depth 10 to 20cm.	
<b>TA-292. Palasi</b>	<b><math>2470 \pm 60</math></b>
Peat from depth 60 to 70cm.	
<b>TA-293. Palasi</b>	<b><math>2940 \pm 60</math></b>
Peat from depth 80 to 90cm.	
<b>TA-312. Palasi</b>	<b><math>3920 \pm 50</math></b>
Peat from depth 120 to 130cm.	
<b>TA-295. Palasi</b>	<b><math>4260 \pm 70</math></b>
Peat from depth 180 to 190cm.	
<b>TA-313. Palasi</b>	<b><math>4390 \pm 70</math></b>
Peat from depth 200 to 210cm.	
<b>TA-296. Palasi</b>	<b><math>4520 \pm 70</math></b>
Peat from depth 220 to 230cm.	
<b>TA-297. Palasi</b>	<b><math>4680 \pm 70</math></b>
Peat from depth 270 to 280cm.	
<b>TA-291. Palasi</b>	<b><math>5800 \pm 90</math></b>
Peat from depth 340 to 350cm.	
<b>TA-298. Palasi</b>	<b><math>6570 \pm 70</math></b>
Peat from depth 420 to 430cm.	

<b>TA-294. Palasi</b>	<b>7720 ± 70</b>
Peat from depth 510 to 520cm.	
<b>TA-299. Palasi</b>	<b>8490 ± 70</b>
Peat from depth 520 to 530cm.	
<b>TA-314. Palasi</b>	<b>8500 ± 70</b>
Peat from depth 530 to 540cm.	
<b>TA-315. Palasi</b>	<b>8570 ± 70</b>
Peat from depth 570 to 580cm.	
<b>TA-300. Palasi</b>	<b>8730 ± 90</b>
Sapropel from depth 590 to 600cm.	

**Linnusaare series**

Linnusaare raised bog belongs to the Endla bog system in Jõgeva dist, 7km NW of Jõgeva. Sample coll 1973 by E Ilves and A Sarv.

<b>TA-696. Linnusaare</b>	<b>240 ± 60</b>
Peat from depth 190 to 200cm.	
<b>TA-697. Linnusaare</b>	<b>2370 ± 70</b>
Peat from depth 270 to 280cm.	
<b>TA-699. Linnusaare</b>	<b>3830 ± 70</b>
Peat from depth 360 to 370cm.	
<b>TA-700. Linnusaare</b>	<b>6330 ± 70</b>
Peat from depth 440 to 450cm.	
<b>TA-701. Linnusaare</b>	<b>6980 ± 70</b>
Peat from depth 550 to 560cm.	
<b>TA-702. Linnusaare</b>	<b>8710 ± 80</b>
Peat from depth 580 to 590cm.	
<b>TA-703. Linnusaare</b>	<b>9140 ± 80</b>
Peat from depth 620 to 630cm.	
<b>TA-704. Linnusaare</b>	<b>9360 ± 80</b>
Peat from depth 630 to 640cm.	

*Peat bogs of west Siberia***Pangoda series**

Tomsk region, Yamal-Nenets natl dist, between Nazym and Pura Rivers, near Pangoda settlement. Sample coll from basal layers of peat deposits and subm 1974 by O Liss (M V Lomonosov Moscow State Univ).

<b>TA-743. Pangoda 1</b>	<b>2870 ± 60</b>
<i>Carex-Sphagnum</i> fen peat from depth 140 to 145cm.	

<b>TA-744. Pangoda 2</b>	<b>6680 ± 70</b>
Sedge fen peat from depth 280 to 300cm.	
<b>TA-745. Pangoda 3</b>	<b>750 ± 60</b>
<i>Sphagnum</i> fen peat from depth 65 to 75cm.	
<b>TA-746. Pangoda 4</b>	<b>5610 ± 70</b>
Wood from depth 300cm.	
<b>TA-752. Pangoda 5</b>	<b>5810 ± 70</b>
<i>Sphagnum</i> fen peat from depth 320 to 330cm.	

**Tevriz series**

Tomsk region, between Chizhapka and Chuzika Rivers, 60km SW of Chudino settlement. Sample coll and subm 1975 by O Liss.

<b>TA-510. Tevriz</b>	<b>190 ± 50</b>
<i>Sphagnum fuscum</i> raised peat from depth 90 to 100cm.	
<b>TA-509. Tevriz</b>	<b>3220 ± 60</b>
Complex raised peat from depth 225 to 235cm.	
<b>TA-508. Tevriz</b>	<b>3610 ± 60</b>
Sedge- <i>Sphagnum</i> mesotrophic peat from depth 250 to 260cm.	
<b>TA-507. Tevriz</b>	<b>3710 ± 60</b>
Sedge- <i>Sphagnum</i> mesotrophic peat from depth 275 to 285cm.	
<b>TA-506. Tevriz</b>	<b>7740 ± 70</b>
Forest sedge fen peat from depth 410 to 430cm.	

**Novyi Tevriz series**

Tomsk region, near Novyi Tevriz settlement on Vasyugan R. Sample coll and subm 1977 by O Liss.

<b>TA-1037. Novyi Tevriz</b>	<b>4260 ± 80</b>
<i>Bryales</i> -sedge fen peat from depth 0 to 10cm.	
<b>TA-1036A. Novyi Tevriz</b>	<b>8300 ± 70</b>
Forest sedge <i>Sphagnum</i> fen peat from depth 185 to 195cm.	
<b>TA-1036B. Novyi Tevriz</b>	<b>8400 ± 70</b>
Repeated date. Wood of willow family. Id. by U Veibri, Estonian Acad Agric.	

<b>TA-617. Novyi Vasyugan 1</b>	<b>2390 ± 70</b>
Forest sedge fen peat from depth 10 to 20cm covered by mineral sediments, 200cm thick, from Tomsk region, Vasyugan R near settlement Novyi Vasyugan. Sample coll and subm 1973 by O Liss.	
<b>TA-618. Novyi Vasyugan 2</b>	<b>6120 ± 80</b>
Forest sedge fen peat from depth 210 to 220cm.	
<b>TA-666. Parabel</b>	<b>7260 ± 90</b>
Forest sedge fen peat from depth 550 to 570cm. Tomsk region, settlement Parabel. Sample coll and subm 1973 by O Liss.	

**Arkadyevo series**

Tomsk region, Kozhevnikov dist, near Arkadyevo village. Sample coll 1976 by O Liss and N Berezina, subm by O Liss.

**TA-909. Arkadyevo 1** **1580 ± 80**

Forest sedge peat from depth 100 to 120cm.

**TA-910. Arkadyevo 2** **1930 ± 60**

Peat from depth 130 to 150cm.

**TA-911. Arkadyevo 3** **5660 ± 80**

Peat-like sapropel from depth 480 to 500cm.

**Nazym Lyamin series**

Tyumen region, Hanty-Mansy Natl dist, between Nazym and Lyamin Rivers 130km E of Karymkary settlement. Sample coll and subm 1973 by A Nagaiceva (trust "Geoltorfrazvedka").

**TA-667. Nazym-Lyamin 1** **8610 ± 90**

*Bryales* fen peat from depth 300 to 340cm.

**TA-668. Nazym-Lyamin 2** **7490 ± 80**

Forest sedge (mesotrophic) peat from depth 400 to 450cm.

**TA-669. Nazym-Lyamin 3** **7080 ± 90**

Forest sedge fen peat from depth 350 to 380cm.

**TA-933. Kayukovo** **8140 ± 80**

Forest sedge fen peat from depth 580 to 600cm. Tyumen region, between Demyanka and Yuganka Rivers, 180km S of Nefteyugansk settlement, near Kayukovo lake. Sample coll and subm 1976 by O Liss.

**TA-934. Salmo-Yugansk** **8900 ± 90**

Peat-like sapropel from depth 480 to 500cm. Tyumen region, between Demyanka and Yuganka Rivers, 180km SE of Nefteyugansk settlement. Sample coll and subm 1976 by O Liss.

**TA-1037. Purpe** **6330 ± 80**

Grass fen peat from depth 200cm. Tyumen region, Yamalo-Nenets natl dist, near Purpe R. Sample coll 1977 by O Turkina; subm by O Liss.

**TA-1038. Nizhnevaratovsk** **8000 ± 80**

*Bryales*-sedge fen peat from depth 600 to 625cm. Tyumen region, Nizhnevaratovsk dist, 2km W of Lake Samotlor. Sample coll 1977 by O Poloshnikova, subm by O Liss.

**TA-901. Guskovskij-Ryam 1** **4180 ± 70**

Fen peat from depth 260 to 280cm. Novosibirsk region, Chulymsk dist, near Kabinetnaya sta. Sample coll and subm 1976 by O Liss.

**TA-902. Guskovskij-Ryam 2** **3580 ± 70**

Fen peat from depth 900 to 920cm.

**Baksinskoye series**

Novosibirsk region, Kolyvanovsk dist, Baksinskoye peat deposit.  
Sample coll 1978 by O Liss and N Berezina; subm by O Liss.

**TA-903. Baksinskoye 1** **Modern**

Fen peat from depth 30 to 50cm, at bog edge.

**TA-904. Baksinskoye 2** **440 ± 80**

Forest sedge peat from a small hollow ("saucer"), from depth 20 to 40cm.

**TA-905. Baksinskoye 3** **1640 ± 70**

Forest sedge-*phragmites* peat from depth 180 to 200cm.

**TA-906. Baksinskoye 4** **2610 ± 70**

Fen peat from depth 265 to 275cm.

**TA-907. Baksinskoye 5** **3380 ± 80**

Forest sedge-*phragmites* fen peat from depth 415 to 425cm.

**TA-908. Baksinskoye 6** **3050 ± 70**

Fen peat from depth 190 to 210cm.

**TA-596. Ubinskoye 1** **4350 ± 70**

Grass fen peat from depth 300 to 310cm. Novosibirsk region, Ubinskoye settlement. Sample coll and subm 1973 by O Liss.

**TA-597. Ubinskoye 2** **2140 ± 80**

*Carex-Sphagnum* fen peat from depth 125 to 135cm.

*Lakes of Estonia***Ulemiste series**

Ulemiste lake lies on SW border of Tallinn, on N Estonian plateau, at ca +36m. Area, 9.6km<sup>2</sup>, max depth, 6m. Sample coll and subm 1974 by L Saarse, Inst Geol (IG), ESSR Acad Sci.

**TA-691. Ulemiste 1** **8300 ± 90**

Limy sapropel from depth 570 to 580cm.

**TA-690. Ulemiste 2** **5330 ± 80**

Sapropel from depth 370 to 380cm.

**TA-689. Ulemiste 2** **5330 ± 80**

Sapropel from depth 410 to 420cm.

**Rätsma series**

Rätsma Lake belongs to Kurtina lake system in NE Estonia. Area, 0.18km<sup>2</sup>, max depth, 10.8m. Sample coll and subm 1974 by L Saarse; pollen analyses by R Pirrus (IG).

**TA-688. Rätsma 1** **12,040 ± 100**

Aleuritic sand with admixture of *Bryales* moss from depth 530 to 540cm.

**TA-686. Rätisma 2** **4080 ± 60**

Lake lime with plant remains from depth 90 to 100cm.

**TA-687. Rätisma 2** **12,050 ± 120**

Lake lime with admixture of *Bryales* moss from depth 360 to 370cm.

#### **Elistvere series**

Elistvere Lake is one of drumlin country lakes in E Estonia, 4.5km SE of Järve settlement. Area of this low level lake is 1.8km<sup>2</sup>. Sample coll and subm 1974 by L Saarse; pollen analyses by R Pirrus.

**TA-683. Elistvere** **860 ± 60**

*Phragmites* peat from depth 70 to 80cm.

**TA-684. Elistvere** **1330 ± 60**

Sapropelized forest *phragmites* peat from depth 170 to 180cm.

**TA-685. Elistvere** **8990 ± 90**

Sapropel containing distributed wood remains and detritus of sub-fossil mollusk from depth 380 to 390cm.

#### **Pangodi series**

Pangodi Lake lies in N part of moraine-type Otepää Heights, 10km SE of Elva, at +105m; area, 1.15km<sup>2</sup>. Sample coll and subm 1974 by L Saarse.

**TA-652. Pangodi** **1540 ± 80**

Sapropel containing distributed fragments of mollusks from depth 500 to 510cm.

**TA-651. Pangodi** **4590 ± 80**

Sapropel from depth 930 to 940cm.

**TA-650. Pangodi** **6660 ± 90**

Sapropel containing distributed fragments of mollusks from depth 1160 to 1170cm.

#### **Kirikumäe series**

Kirikumäe Lake lies in Võru dist, 7.5km SE of Vastseliina, at +183m; area, 0.61km<sup>2</sup>, max depth, 3.5m.

**TA-677. Kirikumäe** **2680 ± 80**

*Sphagnum* peat from depth 450 to 460cm.

**TA-678. Kirikumäe** **3210 ± 70**

*Bryales-phragmites* peat from depth 570 to 580cm.

**TA-679. Kirikumäe** **8530 ± 80**

Sapropel layered with plant remains from depth 780 to 790cm.