

TARTU RADIOCARBON DATES X

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The present list includes 74 dates of geologic samples determined using the liquid scintillation ^{14}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}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.

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

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

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

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

- TA-744. Pangoda 2** **6680 ± 70**
Sedge fen peat from depth 280 to 300cm.
- TA-745. Pangoda 3** **750 ± 60**
Sphagnum fen peat from depth 65 to 75cm.
- TA-746. Pangoda 4** **5610 ± 70**
Wood from depth 300cm.
- TA-752. Pangoda 5** **5810 ± 70**
Sphagnum 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.
- TA-510. Tevriz** **190 ± 50**
Sphagnum fuscum raised peat from depth 90 to 100cm.
- TA-509. Tevriz** **3220 ± 60**
Complex raised peat from depth 225 to 235cm.
- TA-508. Tevriz** **3610 ± 60**
Sedge-*Sphagnum* mesotrophic peat from depth 250 to 260cm.
- TA-507. Tevriz** **3710 ± 60**
Sedge-*Sphagnum* mesotrophic peat from depth 275 to 285cm.
- TA-506. Tevriz** **7740 ± 70**
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.
- TA-1037. Novyi Tevriz** **4260 ± 80**
Bryales-sedge fen peat from depth 0 to 10cm.
- TA-1036A. Novyi Tevriz** **8300 ± 70**
Forest sedge *Sphagnum* fen peat from depth 185 to 195cm.
- TA-1036B. Novyi Tevriz** **8400 ± 70**
Repeated date. Wood of willow family. Id. by U Veibri, Estonian Acad Agric.
- TA-617. Novyi Vasyugan 1** **2390 ± 70**
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.
- TA-618. Novyi Vasyugan 2** **6120 ± 80**
Forest sedge fen peat from depth 210 to 220cm.
- TA-666. Parabel** **7260 ± 90**
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, Chulysk 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.

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| 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- <i>phragmites</i> 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- <i>phragmites</i> 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 |
| <i>Carex-Sphagnum</i> 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, 9.6km², max depth, 6m. Sample coll and subm 1974 by L Saarse, Inst Geol (IG), ESSR Acad Sci.

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| 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 Kurtna lake system in NE Estonia. Area, 0.18km², max depth, 10.8m. Sample coll and subm 1974 by L Saarse; pollen analyses by R Pirrus (IG).

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| TA-688. Rätsma 1 | 12,040 ± 100 |
| Aleuritic sand with admixture of <i>Bryales</i> 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 1.8km². 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, 1.15km². 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, 0.61km², 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.