Figure 1. General characteristics of polluted soils M4, M15, M3, MT and European Union concentration limits for agricultural grounds

Characteristics	M4	M15	M3	MT	UE*
pH	7.70	7.86	6.76		6 / 7
EC (dS m^{-1})	2.21	0.15	1.56		
CaCO3 (%)	28.0	15.0	-		
CEC (cmolc kg^{-1})	10.6	n.d.	-		
OM (%)	0.65	7.6	-		
Organic-C (g kg^{-1})	3.8	4.4	1.18		
Total-N (g kg^{-1})	0.3	0.6	0.073		
Fe (g kg^{-1})	53.1	n.d.	n.d.		
Mn (g kg^{-1})	1.6	n.d.	n.d.		
Cu (mg kg^{-1})	42	35	322		140
Pb (mg kg^{-1})	1572(353)	2345(179)	11.426	25000	300
Zn (mg kg^{-1})	2602(147)	1826 (7.7)	4539	12000	300
Ni (mg kg^{-1})	<2.0	27	32	n.d.	75
Cd (mg kg^{-1})	<0.2	0.3	60	70	3
Cr (mg kg^{-1})	<2.0	36	17	n.d	150
As (mg kg^{-1})	n.d.	n.d.	n.d.	13500	n.d.

Figure 2. Diagram - Biomass increase in Wild Nicotiana glauca (wt) and genetically modified with TAPCS1 gene (OMG)

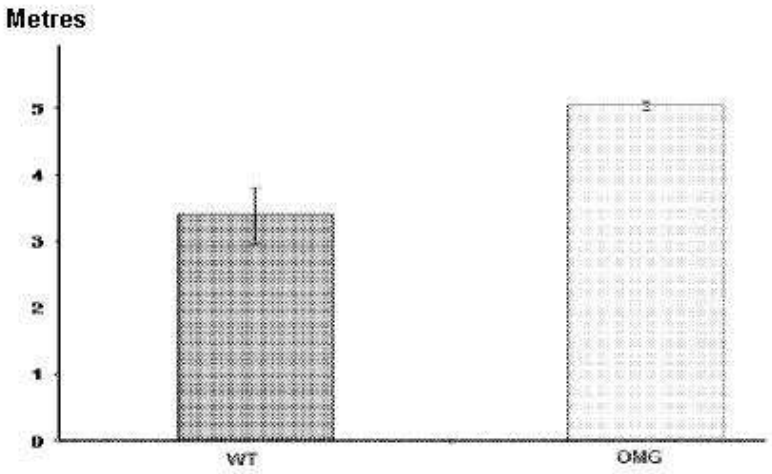


Figure 3. Lead and zinc concentrations in mg/kg in polluted soils M4 and M15 in wild plants of Populus tremula x tremuloides cv. Etropole (wt) and genetically modified

	Biomass			Concentration ($mg \cdot Kg^{-1}$)				Accumul. (µg)		RCF		RCF	
	Weight (g)			Pb		Zn							
	T	A	R	A	R	A	R	Pb	Zn	Pb	Zn	Pb	Zn
M4 soil													
wt	2.4	1.4(0.5)	1.0(0.2)	29(3)	330(23)	362(38)	307(25)	371	813	0.08	2.5	0.93	2.1
PTa3	4.4	2.5(0.3)	1.9(0.1)	35(4)	337(30)	382(31)	321(33)	728	1565	0.10	2.6	0.95	2.2
PTa5	4.2	2.3(0.2)	2.3(0.2)	28(5)	343(42)	394(37)	334(22)	648	1474	0.08	2.7	0.97	2.3
M15 soil													
wt	6.8	4.6(0.2)	2.2(0.4)	5(1)	220(17)	258(38)	212(10)	507	1653	0.03	33.5	1.23	27.5
PTa3	6.5	4.0(0.3)	2.5(0.2)	9(3)	215(23)	268(29)	207(11)	574	1590	0.05	34.8	1.20	26.9
PTa5	5.9	3.4(0.2)	2.3(0.1)	7(3)	246(31)	273(25)	225(21)	590	1446	0.04	35.5	1.37	29.2

Figure 4 **Biomass Increase in Soil M5 in Populus tremula x tremuloides cv.**



Figure 5

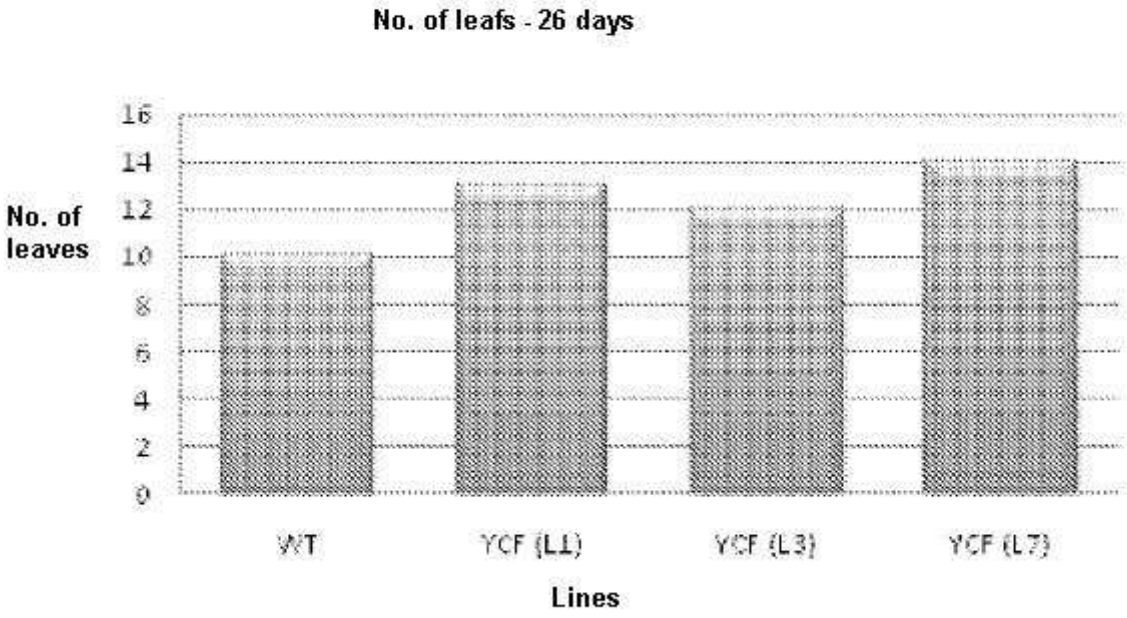


Figure 6

