

Appendix 1: soil nutrient concentrations before planting trial crops, expressed in ppm.

Trial crop	Row type	Depth	N	P	K	Al	B	Ca	Cl	Co	Cu	Fe	I	Mg	Mn	Mo	Na	Ni	S	Se	Si	Zn
<i>A. retroflexus</i>	extraction	0-6"		946.3	1,173.1	11,183.9	10.5	1,782.5		16.3	9.9	22,744.7		2,326.8	459.6	0.4	13.6	15.3	449.4			69
		6-12"		767.6	1,128.5	10,485.4	9.4	1,537.3		15	9.4	20,215.7		2,106.1	435.8	0.31	16.2	13.9	417.4			63.5
		12-24"		588.2	746.8	11,523.4	10.6	2,142.9		18.3	9.6	23,120.1		2,365.8	565.8	0.32	33.4	16.2	268			64.6
	chop and drop	0-6"		896.8	1,145.9	11,033.5	10	2,523.1		15.3	10.3	21,231.2		2,277.8	436.1	0.39	20	14.4	524			67.9
		6-12"		755.5	759.0	11,296.0	10.9	2,136.6		16.6	10.2	23,731.8		2,285.1	466.6	0.4	22.2	15.7	389			69
		12-24"		714.7	719.9	10,360.7	9.7	2,896.7		15.1	9.9	20,734.3		2,225.4	424.2	0.32	27.8	14.3	401.4			63.7
<i>C. album</i>	extraction	0-6"		813.7	1,156.3	10,352.4	9.8	2,092.5		15.5	10	20,975.4		2,253.0	449	0.32	17.3	15	462			65.5
		6-12"		700.8	771.3	11,869.8	11.6	1,915.2		17.6	10.4	25,473.6		2,541.4	473.4	0.32	19.6	17.7	343.4			71.7
		12-24"		559.6	730.8	12,369.6	11	2,052.3		17	10	23,869.0		2,862.6	324.5	0.32	30.1	19.1	255			67.8
	chop and drop	0-6"		983.7	1,558.5	11,221.9	10.1	2,914.5		16.5	10.6	21,695.8		2,353.9	606.5	0.4	21.3	15.6	526			70.2
		6-12"		930.9	1,362.3	11,226.4	9.8	2,255.8		16.7	10.9	21,290.2		2,241.5	626.8	0.4	21.6	15.4	471			67.3
		12-24"		684.6	897.8	11,260.2	12	2,103.8		21.4	10	23,060.0		2,213.5	1,248.20	0.16	18.9	16.7	323.1			67
<i>S. peregrinum</i>	extraction	0-6"		938.5	1,211.8	9,831.1	10	2,750.7		15.3	9.9	20,299.5		2,207.7	651.4	0.39	19.8	13.9	488			68.5
		6-12"		802.4	847.5	10,444.6	9.9	1,816.9		16	9.8	20,986.7		2,158.7	719.1	0.39	16	14.5	384.9			68.4
		12-24"		567.8	581.8	11,081.3	10	1,703.9		16.8	8.8	21,544.0		2,295.6	611.5	0.32	15.2	15.6	268.4			67.2
	chop and drop	0-6"		947.5	957.5	10,550.4	10.1	2,496.0		16.4	10.6	21,563.9		2,265.8	670.4	0.4	15.9	14.8	447.2			69.8
		6-12"		806.3	718.8	11,377.2	10.3	1,911.5		17.2	10.4	22,170.0		2,207.8	847	0.39	17.6	15.5	368.5			68
		12-24"		697.2	613.6	11,367.0	10.1	2,134.0		18	9.7	21,733.7		2,222.2	994.2	0.32	17.2	15.3	330.2			67.8
<i>T. officinale</i>	extraction	0-6"		1257.4	1,501.9	9,127.3	9.9	4,515.5		15	11	18,615.5		2,779.7	544.5	0.24	15	14.3	789.7			69.5
		6-12"		825.3	961.6	9,332.1	9.4	1,798.4		15.4	10	18,799.0		2,077.5	598.6	0.16	10.4	14.2	428.7			63.9
		12-24"		336.4	500.8	8,055.0	9.5	1,195.2		14.6	6.3	19,671.8		2,302.5	296	0	13	15	149.9			54.7
	chop and drop	0-6"		1083.7	1,155.2	9,141.2	9.1	4,739.5		14.9	10.6	18,469.7		2,386.5	548.2	0.16	12	14.4	588.5			68.4
		6-12"		822.4	855.0	10,336.2	9.4	2,141.8		16.2	10.6	20,138.4		2,223.4	582.9	0.08	12.1	15.4	414.3			64.5
		12-24"		600.9	662.1	11,814.4	11.5	2,095.0		20.7	10.4	25,227.6		2,960.5	644.9	0	16.4	20.3	269.8			67.9
<i>T. pratense</i>	extraction	0-6"		965.1	893.6	10,796.5	10.3	5,987.5		16.1	10.7	21,901.5		2,324.3	656.4	0.4	25	15.1	504.6			69
		6-12"		977.5	717.3	11,704.8	10.9	2,221.9		17.1	11.2	22,593.1		2,296.8	696.3	0.4	25.3	15.8	427.4			71.9
		12-24"		694.0	630.8	13,197.0	11.5	2,156.2		20.8	10.7	24,653.5		2,668.3	1,247.70	0.39	25.7	19.5	310.9			70.3
	chop and drop	0-6"		1010.3	1,101.3	11,070.0	10.2	3,628.8		17.1	11.2	21,487.3		2,333.9	690.2	0.4	22.5	15.1	500.6			70.1
		6-12"		990.5	808.2	11,735.4	10.8	2,321.9		17.1	11.5	23,267.2		2,328.8	658	0.23	23.5	15.8	409.4			72.4
		12-24"		862.7	758.1	12,047.8	10.7	3,333.6		18.3	11.9	23,083.4		2,241.6	747.7	0.31	32.9	15.4	401.2			69.7
<i>U. dioica</i>	extraction	0-6"		1025.1	1,664.7	12,170.1	11.5	3,631.1		17.6	11.3	24,581.8		2,621.9	540.6	0.48	37.8	16.7	535.1			73.6
		6-12"		880.9	1,194.5	12,462.8	11	2,389.6		18.3	11.2	23,625.5		2,435.7	554.9	0.4	36.2	16.7	435			73.5
		12-24"		675.0	811.8	13,600.9	11.6	2,536.7		22.6	12.1	25,491.8		2,650.6	766.1	0.24	50.8	18.6	300.7			71.7
	chop and drop	0-6"		1175.0	1,834.3	11,434.8	11.4	2,453.5		17.8	10.6	24,419.3		2,482.8	508.1	0.55	19.8	15.8	539.5			69.6
		6-12"		827.5	1,418.1	11,125.7	10.3	2,112.3		16.4	10.5	22,180.8		2,287.2	498.9	0.47	28.7	15.5	400.9			68.3
		12-24"		597.3	897.3	8,958.7	8.4	1,968.2		13.9	8.5	17,846.9		1,932.6	403	0.31	27.1	12.8	304.7			53.7
Fallow	-	0-6"		1000.6	1,064.5	11,143.0	10.8	2,861.1		16.6	11.5	23,095.2		2,368.5	556.1	0.32	29	15.7	486.9			69.8
		6-12"		959.9	772.0	12,141.2	11.4	2,062.7		18.4	11.8	24,521.3		2,385.6	621.3	0.47	31.7	17.5	425.4			70.8
		12-24"		904.8	865.0	13,030.5	11.4	2,998.7		18.6	12	24,519.3		2,660.9	685.4	0.32	43.3	17.8	420			72.8