

Salaojituksen suunnittelu ja toteutus irlantilaisittain: Osa 3 Tuloksia koetiloilta

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3.10.2018 Ilmajoki

4.10.2018 Loimaa



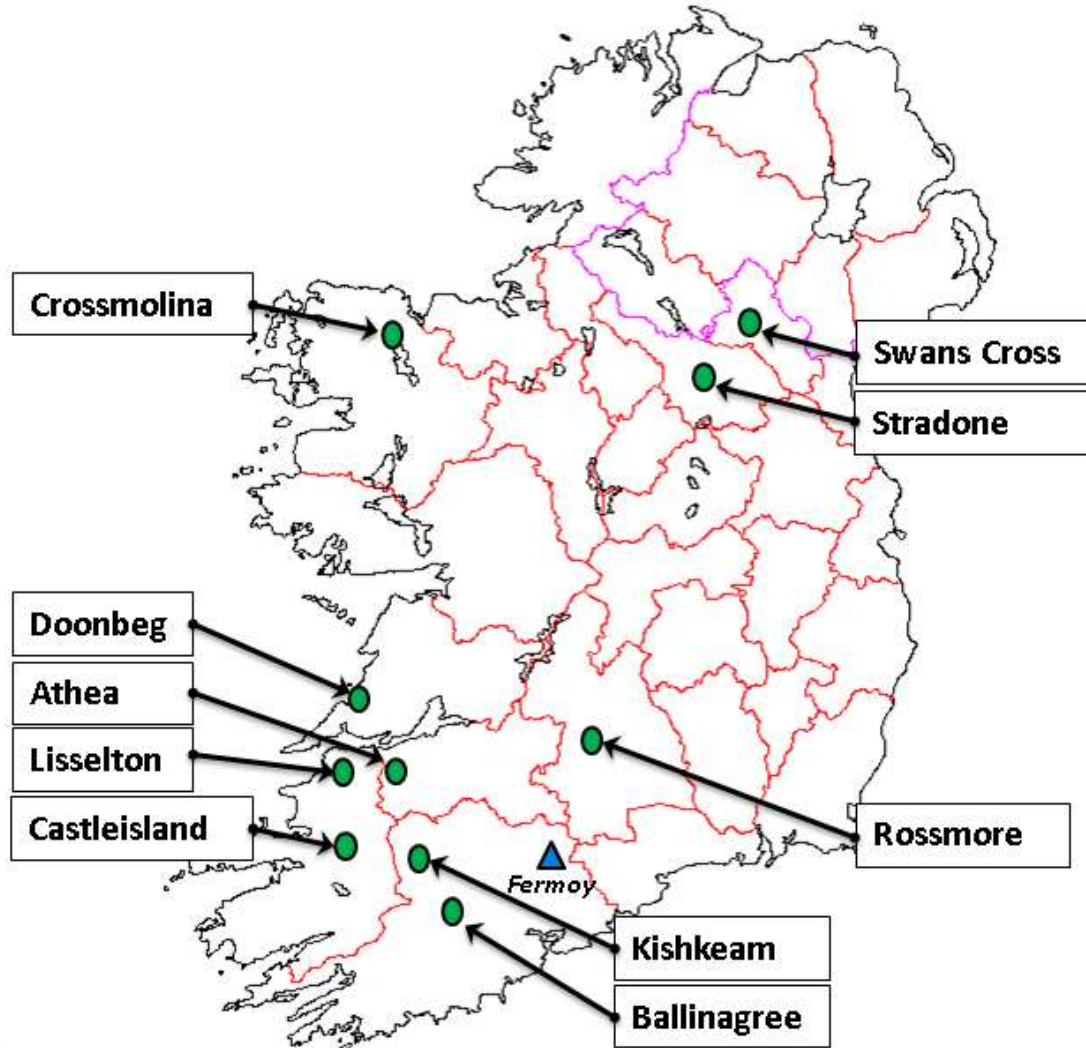
Euroopan maaseudun
kehittämisen maatalousrahasto:
Eurooppa investoi maaseutualueisiin.



The Irish Agriculture and Food Development Authority

“Raskaiden maiden tutkimusohjelman” koetilojen salaojitussuunnitelmat ja toimivuus



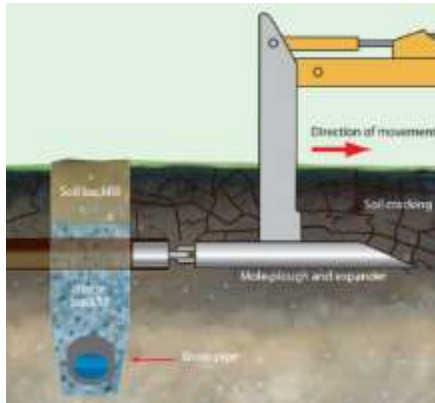


				Mineral Fraction					
Site	Soil type	Horizon	Depth (cm)	OM (%)	Sand (%)	Silt (%)	Clay (%)	Textural Class	Drainage System (Design type: GW or SH)
1	Surface	Apg	0-28	5.6	69	16	15	Sandy Loam	1.1: Field drains at 1.6 m depth, 30 m spacing (GW)
	Water Gley	Eg	29-50	0.4	88	8	4	Loamy Sand	
		C	51-90	0.8	59	27	14	Sandy Loam	1.2: Field drains at 1.6 m depth, 15 m spacing (GW)
		Cr	91-140	0.6	69	17	14	Sandy Loam	
2	Ombrotrophic Peat	OA	0-40	68.8	-	-	-	-	2: Field drains at 1.7 m depth, 15 m spacing (GW)
		Of	41-85	89.5	-	-	-	-	
		Om	86-116	3.3	11	61	28	Silty Clay Loam	
		C1	117-141	-	-	-	-	-	
		C2	142-180	-	-	-	-	-	
3	Humic Surface Water Gley	AC	0-30	7.5	51	34	15	Loam	3: Field drains at 1.7 m depth, 20 m spacing (GW)
		BC	31-80	0.7	60	31	9	Sandy Loam	
		Cr	81-116	0.6	48	41	11	Loam	
4	Humic Brown Podzolic	Ap	0-25	11	15	49	36	Silty Clay Loam	4: Field drains at 1.1 m depth, 15 m spacing supplemented by sub-soiling at 0.6 m depth, 1.5 m spacing (GW)
		Bt	26-65	4.4	21	54	25	Silt Loam	
		Cr	66-110	2.3	39	40	21	Loam	
		R	111-220	-	-	-	-	-	
5	Groundwater Gley	Apg	0-26	6.3	21	45	34	Clay Loam	5: Field drains at 0.9 m depth, 15 m spacing supplemented by mole drains at 0.6 m depth, 1.4 m spacing (SH)
		Btg	27-48	2.2	13	49	38	Silty Clay Loam	
		Cg1	49-75	1	12	59	29	Silty Clay Loam	
		Cg2	76-140	0.9	23	50	27	Silt Loam	
6	Humic Surface Water Gley	Ap/O	0-40	59.6	40	26	34	Clay Loam	6: Field drains at 0.9 m depth, 20 m spacing supplemented by gravel mole drains at 0.45 m depth, 1.5 m spacing (SH)
		Btg	41-62	4.5	7	51	42	Silty Clay	
		Cg1	63-140	1.7	13	54	33	Silty Clay Loam	
		Cg2	141-170	0.9	22	55	23	Silt Loam	
7	Stagnic Luvisol	Ap	0-36	8.5	20	45	35	Silty Clay Loam	7.1: Field drains at 0.9 m depth, 20 m spacing supplemented by sub-soiling at 0.5 m depth, 0.6 m spacing (SH)
		BCtg	37-100	1.1	20	50	30	Silty Clay Loam	7.2: Field drains at 0.9 m depth, 20 m spacing supplemented by sub-soiling at 0.5 m depth, 0.6 m spacing and gravel mole drains at 0.45 m depth, 1.5 m spacing (SH)
		Cr	101-190	1.4	34	41	25	Loam	

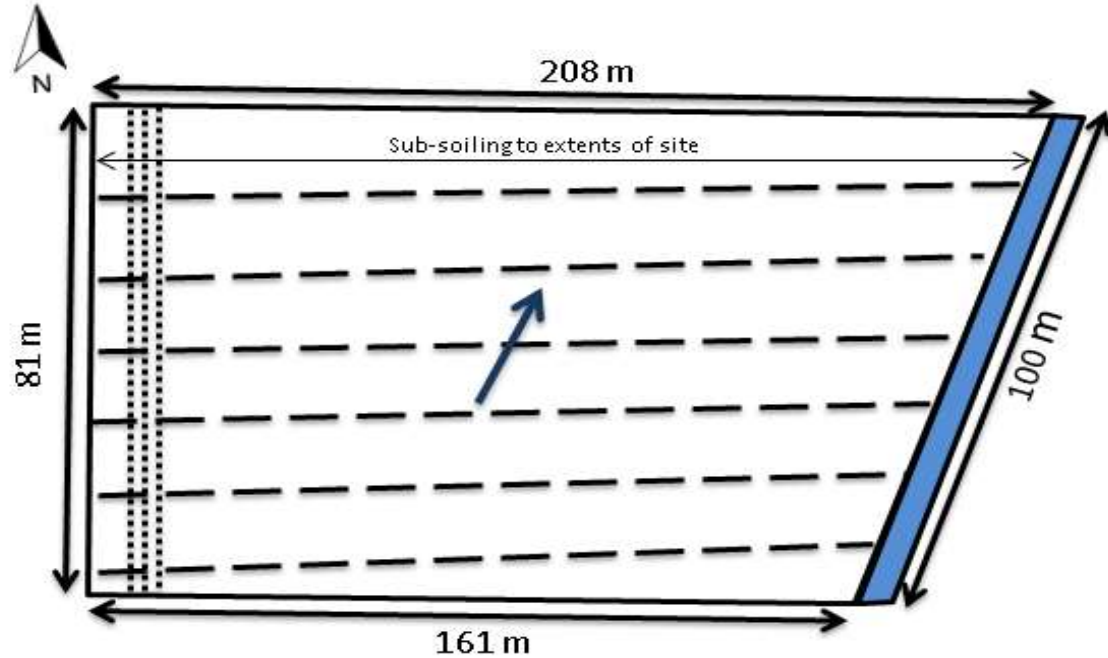
Salaojasuunnitelma: Kishkeam tila



Ongelman analyysi



Salaojasuunnitelma: matala kuivatus



- Field drains: 1.1 m depth, 15 m spacing
- Sub-soiling: 0.6 m depth, 1.5 m spacing
- Open drain
- Direction of field gradient

Imuojat 1,1 m, 15 m välein
Jankkurointi 0,6 m, 1,5 m välein poikittain
Avo-oja
Lohkon viettävyys

Kustannukset: Kishkeam tila



Kustannus

Yht./ha

Asennus @ €45/tunti (36 tuntia) €1,625

Putket @ €1.03/m (566 m) €585

Sora @ €10.78/t (101 t) €1,085

Jankkurointi €125

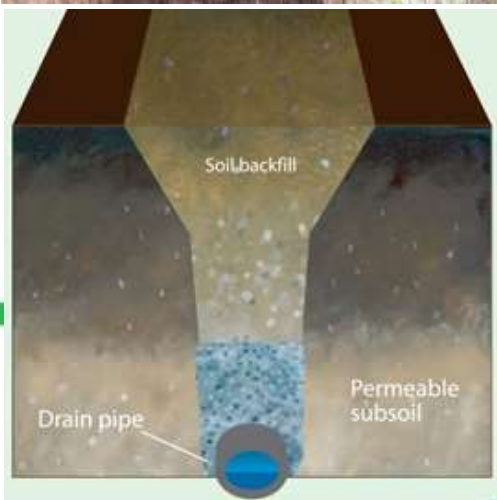
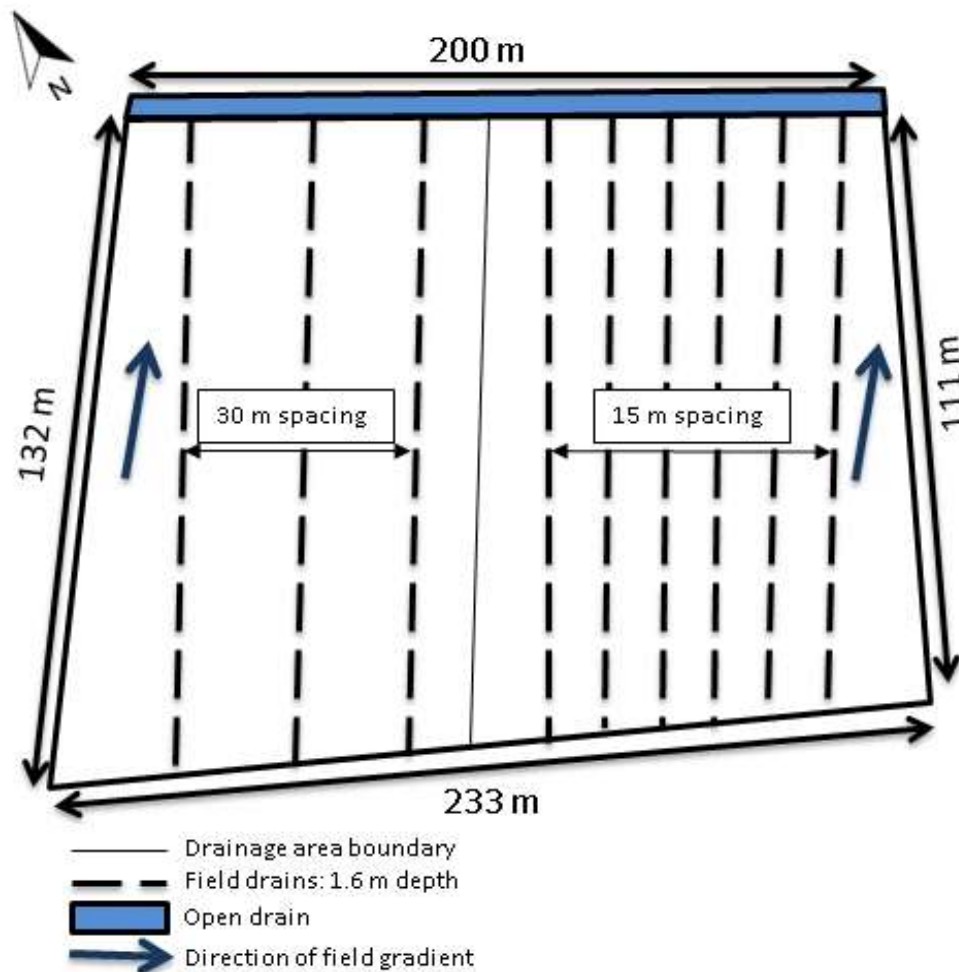
Kustannus €3,420

Salaojasuunnitelma: Rossmore Farm

Ongelman tunnistaminen



Salaojasuunnitelma: pohjavesiputket



Kustannukset: Rossmore tila



Kustannukset

Yht./ha

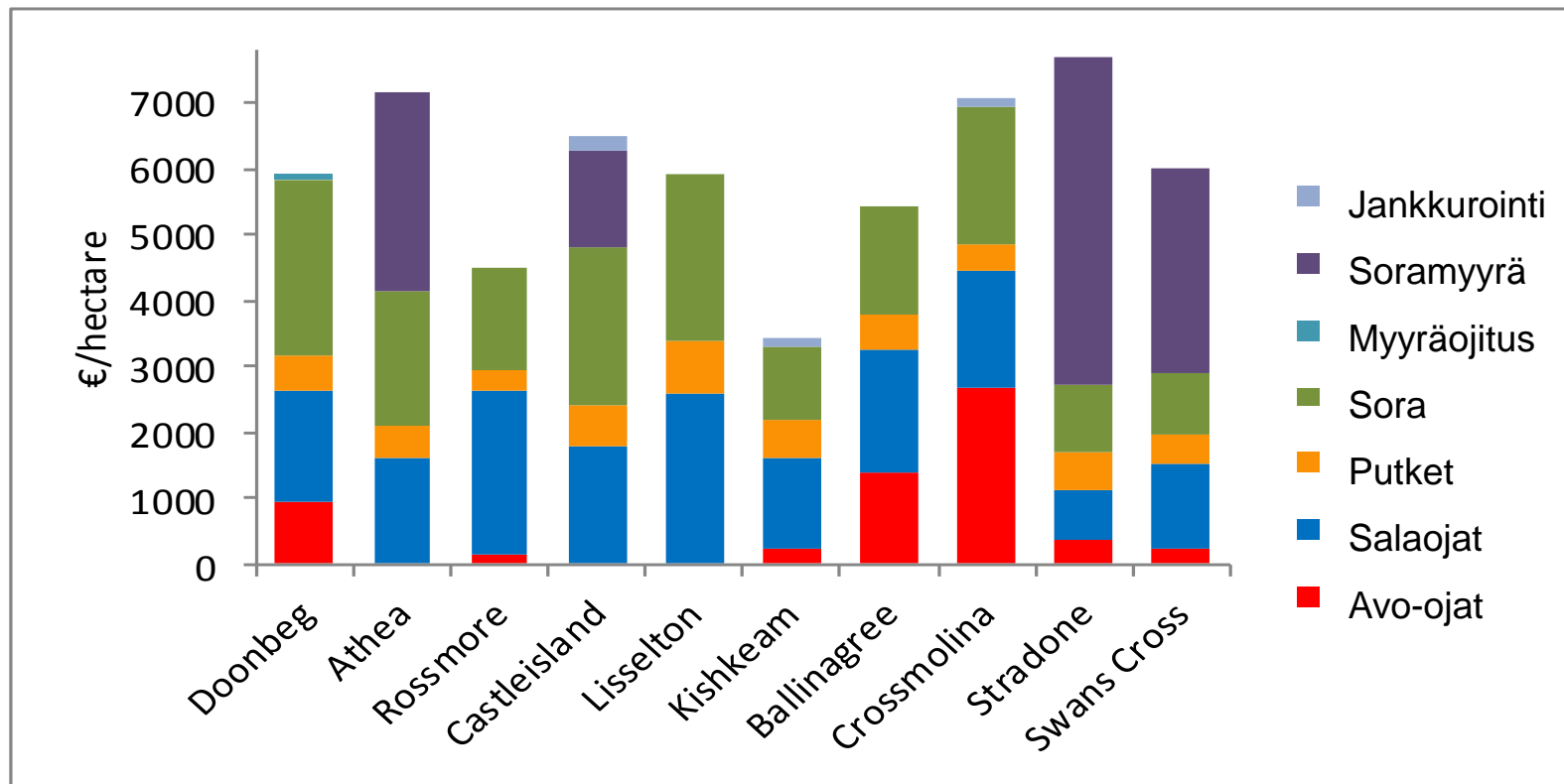
Asennus @ €45/tunti (55 tuntia) €2,476

Putki @ €0.70/m (429 m) €300

Sora @ €11.10/t (141 t) €1,562

Kustannukset €4,338

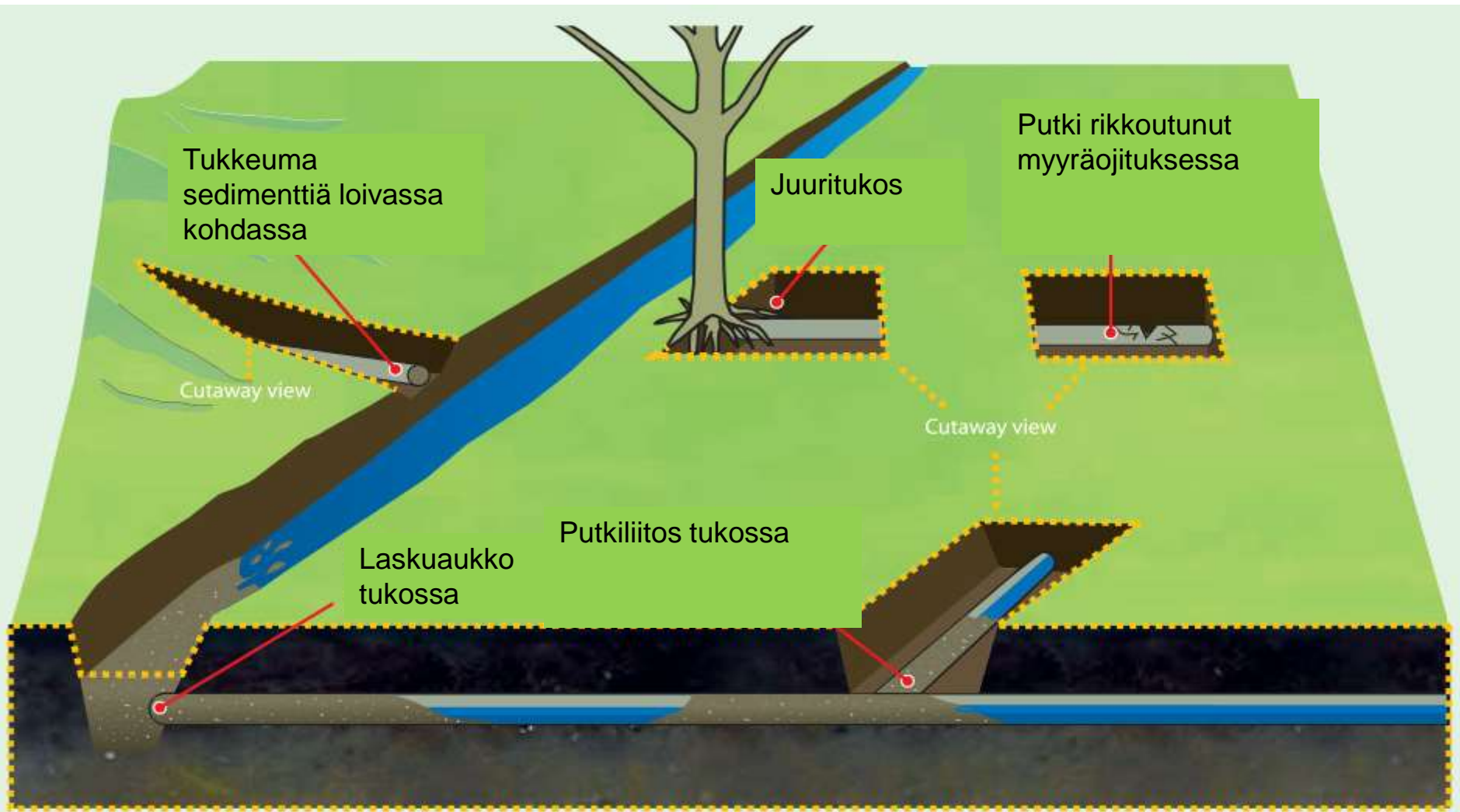
Kustannukset eri koetiloilla



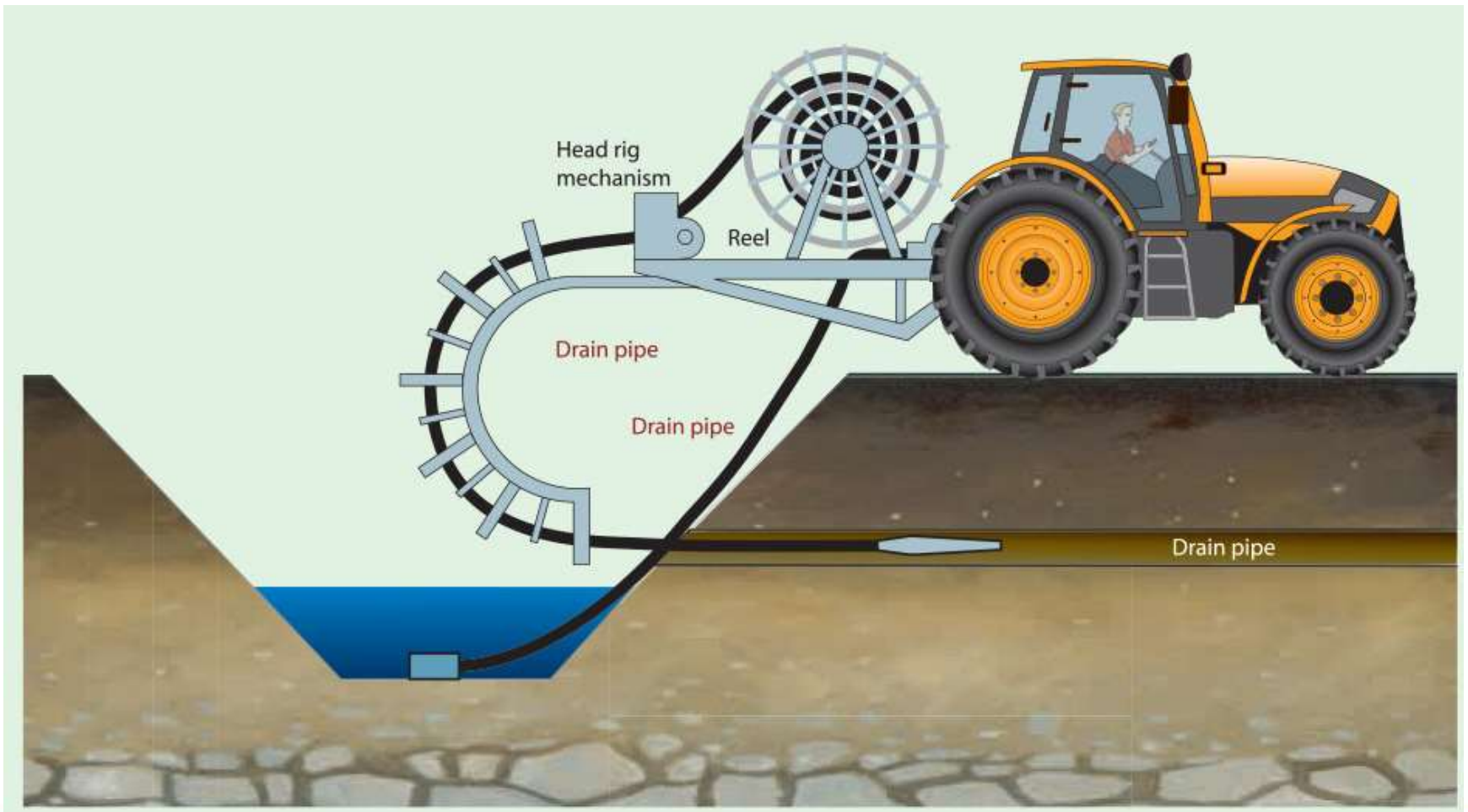
Kaikki kustannukset mukana, tehokkaita kuivatusjärjestelmiä.

Keskimääräinen kustannus 5 960 € /ha (3 420 € /ha - 7 690 € /ha)

Kuivatuksen huolto



Huolto



Lisätietoa

- Teagasc Land Drainage guidebook
- Heavy Soils Open Day booklets
- <https://www.teagasc.ie/crops/grassland/heavy-soils/>
- Teagasc Manual on Drainage and soil management



Kysymyksiä

