INTERCROPPING IN HUNGARIAN VINEYARDS

ÖMKi
Ökológiai Mezőgazdasági Kutatóintézet
Research Institute of Organic Agriculture | Forschungsinstitut für biologischen Landbau
PARTNER OF FIBL SWITZERLAND

DE TTK
Ökológiai Tanszék

BIOCONT MAGYARORSZÁG KFT.
Növényvédelem új szemléletben

MTA-DE Biodiverzitás Kutatócsoport

TOKAJI BORVIDÉK
Szőlészeti és Borászati Kutatóintézet

HORTOBÁGYI NEMZETI PARK

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Hungarian Research Institute of Organic Agriculture (ÖMKi)

Hortobágy

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Floor management technologies

Mechanical cultivation

Cover crops

Soil covering (e.g. straw)

Why do we need cover crops?

- Climate change – heavy rainstorms
- Steep slope plantation
- Avoid soil degradation

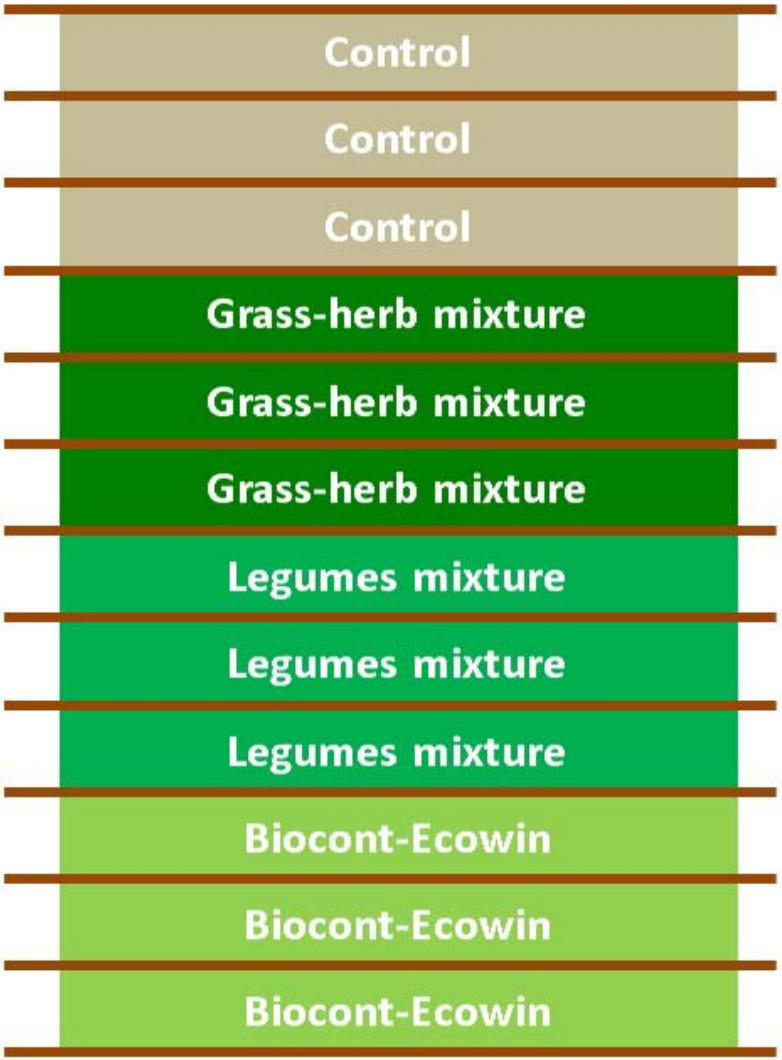
- Save the soil structure
- Allows movement for workers and machines, near all weather conditions

- „Living vineyard”

Requirements for the cover crops

- Should not compete significantly with the grapevines
- The biologically optimal mixture contains local species from local provenance
- Available, not too expensive

Experimental setup of species-rich cover crop mixtures



Control:

Every second inter-row was mechanical cultivated, combined with mown inter-rows

Mixtures	Biocont-Ecowin	Legumes mixture	Grass-herb mixture
Centaurea cyanus			1,0
Achillea cf. millefolium			1,5
Sanguisorba minor	0,5		
Linum perenne			1,5
Phacelia tanacetifolia	2,7		
Trifolium repens	8,1	15,0	5,0
Medicago lupulina	16,2	15,0	10,0
Silene vulgaris			1,5
Centaurea jacea			1,0
Plantago lanceolata	1,1	5,0	10,0
Salvia nemorosa			1,5
Daucus sp.	1,6		
Sinapis alba	5,4		
Fagopyrum esculentum	8,1		
Festuca rupicola			30,0
Lotus corniculatus	2,7	15,0	10,0
Onobrychis viciifolia	37,3	15,0	
Coronilla varia		10,0	10,0
Galium verum			1,5
Vicia sativa var. fuliginosa	16,2	10,0	10,0
Trifolium pratense		15,0	5,0
Species	**11**	**8**	**15**

Mixture of legumes

Grass-herb mixture

Biocont – Ecowin mixture

PÁNTLIKA
PINCÉSZET

CSÁNYI PINCÉSZET
VILLÁNY

Ilyés Kúria
SZEKSZÁRD
PORKOLÁB VÖLGY

GRÓF DEGENFELD
WINERY

GERE
GERE ATTILA PINCÉSZETE

DOMAINE
EDEGGER
BADACSONY

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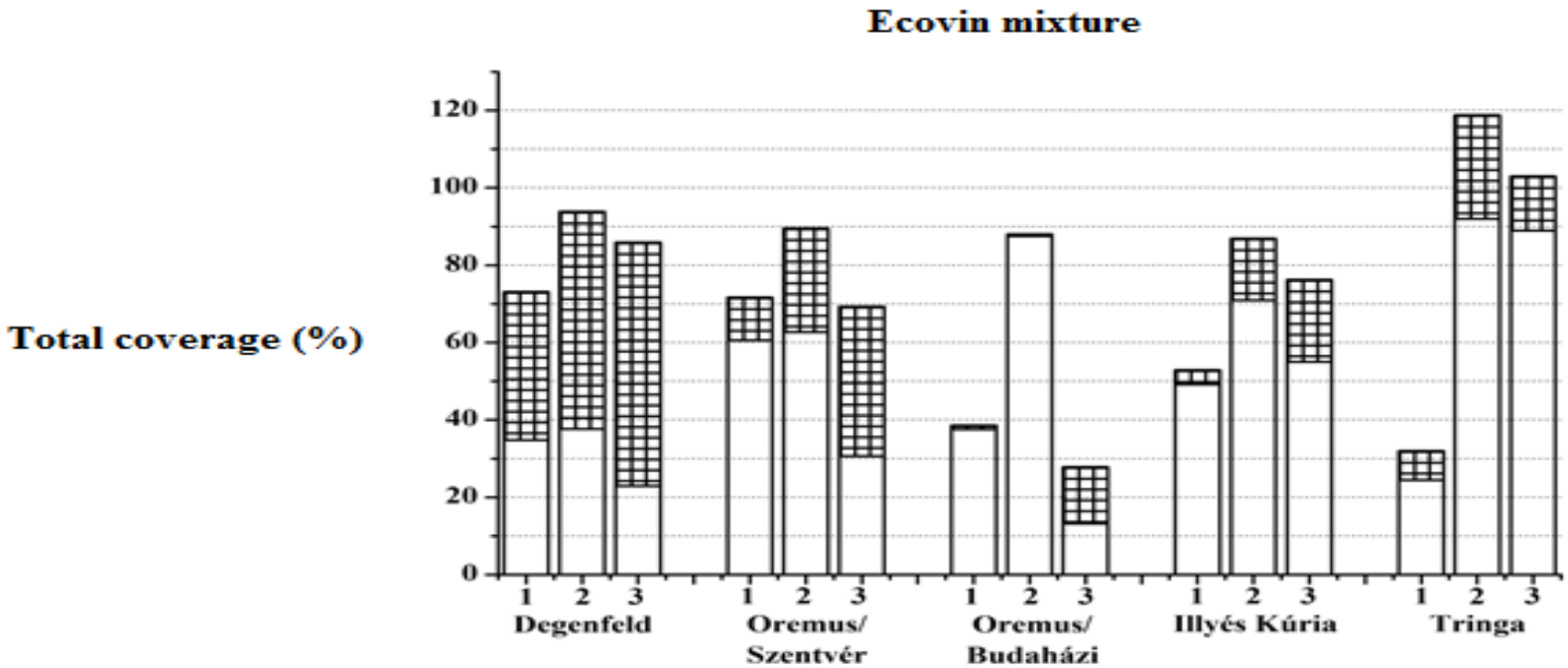
Szőlőbirtok

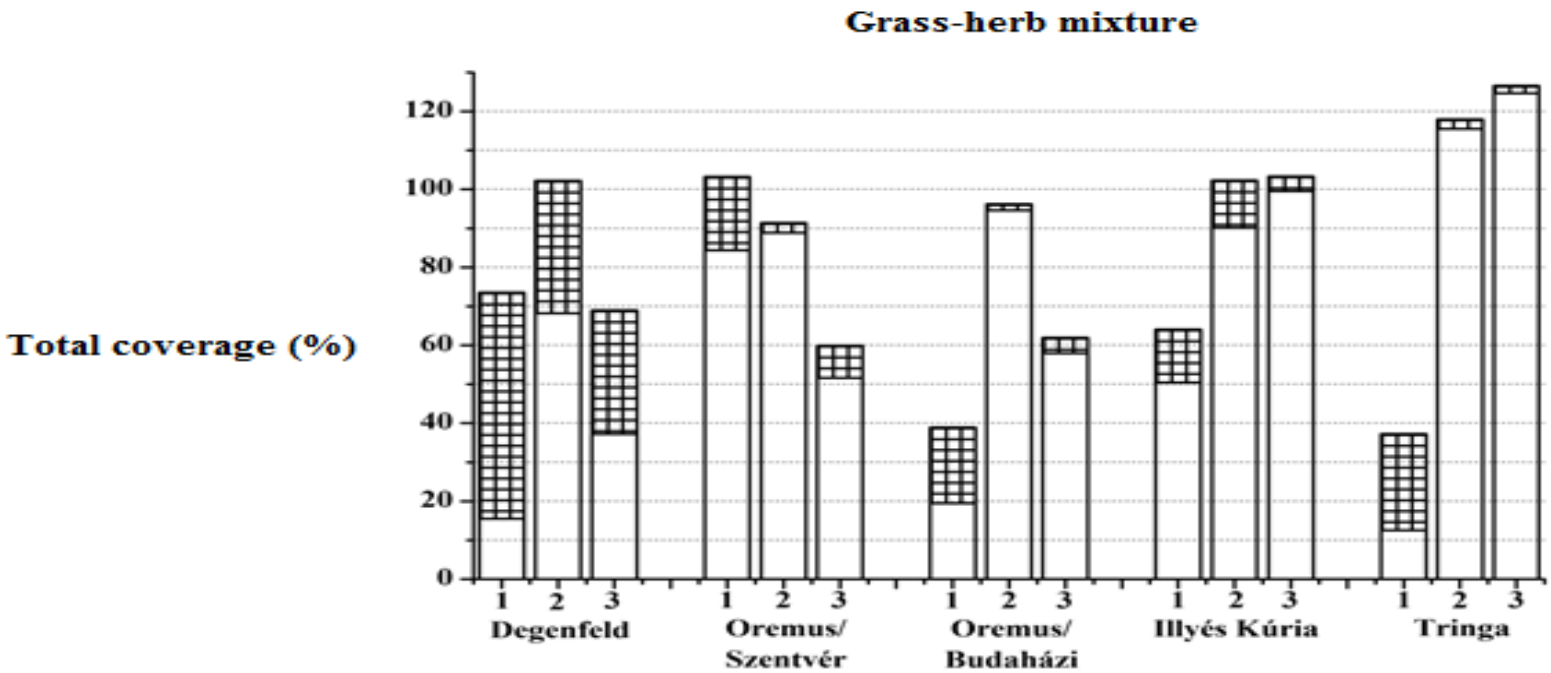
GILVESY

Vida

Ars

Botanical survey


Ecovin mixture
Total coverage (%)
0
20
40
60
80
100
120
1 2 3
Degenfeld
Oremus/
Szentvér
Oremus/
Budaházi
Illyés Kúria
Tringa


Grass-herb mixture
Total coverage (%)
0
20
40
60
80
100
120
1 2 3
Degenfeld
Oremus/
Szentvér
Oremus/
Budaházi
Illyés Kúria
Tringa

Under-vine / Medicago lupulina, Lotus corniculatus, Trifolium repens, Coronilla varia

Thank you for your attention!

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