Supplementary Material

# Supplementary Tables

Table S1: List of treatments

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Treatment |  | Functional group | Species | Ratio (%) |
| Clover-grass mixture | CG | Legumes (L) | *Trifolium pratense* | 30 |
| *Trifolium hybridum* | 5 |
| *Trifolium repens* | 5 |
| Grass (G) | *Lolium multiflorum* | 60 |
| Lucerne-grass mixture | LG | L | *Medicago sativa* | 40 |
| *Trifolium pratense* | 10 |
| G | *Festuca pratensis* | 20 |
| *Lolium perenne* | 15 |
| *Lolium multiflorum* | 10 |
| *Phleum pratense* | 5 |
| Pure clover legumes | LCG | L from CG mixture | *Trifolium pratense* | 75 |
| *Trifolium hybridum* | 12.5 |
| *Trifolium repens* | 12.5 |
| Pure lucerne and clover legumes | LLG | L from LG mixture | *Medicago sativa* | 80 |
| *Trifolium pratense* | 20 |
| Pure grass sward | GCG | G from CG mixture | *Lolium multiflorum* | 100 |
| Pure grass sward | GLG | G from LG mixture | *Festuca pratensis* | 40 |
| *Lolium perenne* | 30 |
| *Lolium multiflorum* | 20 |
| *Phleum pratense* | 10 |

Table S2: List of vegetation indices (VIs). Green (530-570 nm), Red (640-680 nm), RedEdge (730-740 nm), and NIR (770-810 nm) represent the wavebands used by the multispectral sensor to collection spectral information

|  |  |  |
| --- | --- | --- |
| Name | Definition | Reference |
| Simple Ratio |  | (Jordan, 1969) |
| Modified Simple Ratio |  | (Chen, 1996) |
| Green Chlorophyll Index |  | (Gitelson et al., 2005) |
| Green Difference Vegetation Index |  | (Tucker et al., 1979) |
| Difference Vegetation Index |  | (Tucker, 1979) |
| Normalized Difference Vegetation Index |  | (Rouse et al., 1974) |
| Renormalized Difference Vegetation Index |  | (Roujean and Breon, 1995) |
| Green Difference Vegetation Index |  | (Daughtry et al., 2000) |
| Normalized Difference Red Edge Index |  | (Fitzgerald et al., 2010) |
| Chlorophyll Vegetation Index |  | (Vincini et al., 2008) |
| Soil Adjusted Vegetation Index |  | (Huete, 1988) |
| Modified SAVI 2 |  | (Qi et al., 1994) |
| Modified Chlorophyll Absorption Index |  | (Daughtry et al., 2000) |

Table S3: Haralicks texture features

|  |  |
| --- | --- |
| Texture feature | Explanation |
| 1. Energy | Measures the local steadiness of the grey levels |
| 1. Entropy | Measures randomness or degree of disorder |
| 1. Correlation | Shows the linear dependency of grey level values in the GLCM |
| 1. Inverse Difference Moment | Measures the local homogeneity |
| 1. Inertia | Measures the local contrast or amount of variations |
| 1. Cluster Shade | Measures skewness of the GLCM |
| 1. Cluster Prominence | Measures the asymmetry of the GLCM |
| 1. Haralick Correlation | Shows the probability of two pixels with similar grey level |

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