

Online resource I Crop yields per hectare per crop rotation by soil type, and dry matter fraction of harvested crops

	G	M	WOWB	PWSW	PBSW	WOWBS	WOWBWP
<i>ton FM/ha</i>				Clay			
Wheat grain			4.31	4.31	2.16	3.45	4.31
Wheat straw			2.19	2.19	1.10	1.75	2.19
Potato tubers				11.8	11.8		7.88
Sugar beet				17.8	17.8	14.2	
Sugar beet tops and tail				1.07	1.07	0.85	
Rapeseed			0.97			0.77	0.65
Rapeseed straw			0.64			0.51	0.42
Beans			0.76		0.76	0.61	0.51
<i>ton DM/ha</i>							
Silage maize		16.1					
Silage grass	8.14						
Fresh grass	2.95						

Note: G=grass, M=maize, W=wheat, O=oilseed, B=beans, P=potato, S=sugar beet. Unless mentioned otherwise, yields of harvested crops were averages from PPO (2009) and PPO (2012). The yield of sugar beet tops and tails was computed as 6% of the yield of sugar beet (Corré and Langeveld 2008; Van Zeist. et al. 2012). The yield of rapeseed on sandy soils was taken from (Van Geel and Borm 2007). The production of rapeseed straw on sandy soils was computed based on the ratio between seeds and straw on clay. The yield of beans on sandy soils was computed using its yield on clay soil and the yield ratio between field beans grown on clay and sandy soils (WRR 1992). Yield of grass and silage maize were taken from Hooijboer et al. (2014; 2013) and Buis et al. (2012). Dry matter percentages were taken from PPO (2009) (for wheat grain), from Vellinga et al.(2013) (for wheat straw, and beans), from Productboard for arable production (2013) (for potato tubers), and from Marinussen et al. (2012) (for rapeseed). Dry matter percentage of sugar beet was based on Corré and Langeveld (2008). For rapeseed straw we assumed the same dry matter percentage as for wheat straw.

Continued - Online resource I Crop yields per hectare per crop rotation by soil type, and dry matter fraction of harvested crops

	G	M	WOWB	PWSW	PBSW	WOWBS	WOWBWP	G	
<i>ton FM/ha</i>				Sand				Peat	DM fraction
Wheat grain			3.70	3.70	1.85	2.96	3.70		0.84
Wheat straw			1.89	1.89	0.94	1.51	1.89		0.90
Potato tubers				12.32	12.32		8.22		0.21
Sugar beet				16.61	16.61	13.29			0.24
Sugar beet tops and tail				1.00	1.00	0.80			0.24
Rapeseed			1.06			0.84	0.70		0.86
Rapeseed straw			0.70			0.56	0.46		0.90
Beans			0.75		0.75	0.60	0.50		0.86
<i>ton DM/ha</i>									
Silage maize		16.37							
Silage grass	7.74							7.72	
Fresh grass	2.59							2.94	

References

- Buis E, van den Ham A, Boumans LJM, Daatselaar CHG, Doornewaard GJ (2012) Landbouwpraktijk en waterkwaliteit op landbouwbedrijven aangemeld voor derogatie. Resultaten meetjaar 2010 in het derogatiemetnet.
- Corré WJ, Langeveld JWA (2008) Energie- en broeikasgasbalans voor enkele opties van energieproductie uit suikerbiet en bietenblad. Plant Research International B.V., Wageningen
- Hooijboer AEJ, de Koeijer TJ, van den Ham A, Boumans LJM (2014) Landbouwpraktijk en waterkwaliteit op landbouwbedrijven aangemeld voor derogatie in 2012.
- Hooijboer AEJ, van den Ham A, Boumans LJM, Daatselaar CHG, Doornewaard GJ, Buis E (2013) Landbouwpraktijk en waterkwaliteit op landbouwbedrijven aangemeld voor derogatie : resultaten meetjaar 2011 in het derogatiemetnet.
- Marinussen M, Van Kernebeek, H., Broekema, R., Groen, E., Kool, A., Van Zeist, W.J., Dolman, M., Blonk, H. (2012) LCI data for the calculation tool Feedprint for greenhouse gas emissions of feed production and utilization. Cultivation oil seeds and oil fruits. Blonk Consultants Gouda, the Netherlands
- PPO (2009) Kwantitatieve Informatie Akkerbouw en Vollegrondsgroenteteelt 2009. Praktijkonderzoek Plant & Omgeving B.V. Businessunit Akkerbouw, Groene ruimte en Vollegrondsgroenten. Wageningen UR, The Netherlands
- PPO (2012) Kwantitatieve Informatie Akkerbouw en Vollegrondsgroenteteelt 2012. Praktijkonderzoek Plant en Omgeving. Stichting Dienst Landbouwkundig Onderzoek, Wageningen UR, The Netherlands
- Productboard for arable production (2013) Teelthandleiding consumptieaardappelen - kwaliteitseigenschappen. <http://www.kennisakker.nl>.
- Van Geel W, Borm G (2007) Teeltonderzoek aan koolzaad voor biobrandstof 2003-2006. Verslag van veldproeven te Ebelsheerd en Vredepeel. Praktijkonderzoek Plant & Omgeving B.V., Wageningen University and Research Centre, The Netherlands,
- Van Zeist. WJ et al. (2012) LCI data for the calculation tool Feedprint for greenhouse gas emissions of feed production and utilization. Sugar Industry. Blonk Consultants and Wageningen University and Research Centre, The Netherlands
- Vellinga TV, Blonk H, Marinussen M, Van Zeist WJ, De Boer IJM, Starmans D (2013) Methodology used in FeedPrint: a tool quantifying greenhouse gas emissions of feed production and utilization. Wageningen UR Livestock Research, Lelystad
- WRR (1992) Ground for choices, four perspectives for the rural areas in the European Community. Reports to the Government no. 42. Netherlands Scientific Council for Government Policy. SDU uitgeverij, the Hague, the Netherlands, 144 pp