

Table S1. ReCiPe 2016 midpoint and endpoint impacts of seed and vegetatively propagated globe artichoke for 1 ton of product and 1 hectare of cropped land.

		1 ton of product		1 ha of cropped land	
LCIA profile midpoint	Unit	Seed-	Vegetatively-	Seed-	Vegetatively-
		propagated (SP)	propagated (VP)	propagated (SP)	propagated (VP)
Midpoint impacts					
Fine particulate matter formation	kg PM2.5 eq	1.93	1.88	34.66	22.50
Fossil resource scarcity	kg oil eq	166.88	107.02	3003.81	1284.18
Freshwater ecotoxicity	kg 1,4-DCB	581.49	855.3	10466.90	10263.73
Freshwater eutrophication	kg P eq	0.090	0.1	1.62	1.05
Global warming	kg CO ₂ eq	717.14	581.3	12908.56	6975.98
Human carcinogenic toxicity	kg 1,4-DCB	28.33	8.7	509.98	104.26
Human non - carcinogenic toxicity	kg 1,4-DCB	476.09	365.6	8569.66	4387.41
Ionizing radiation	kBq Co-60 eq	40.88	27.6	735.91	331.11
Land use	m²a crop eq	86.10	148.4	1549.85	1781.29
Marine ecotoxicity	kg 1,4-DCB	887.20	1307.7	15969.64	15692.82
Marine eutrophication	kg N eq	1.52	1.9	27.37	23.14
Mineral resource scarcity	kg Cu eq	4.69	2.9	84.46	34.62
Ozone formation, Human health	kg NOx eq	2.45	2.4	44.09	28.78
Ozone formation, Terrestrial ecosystems	kg NOx eq	5.55	5.4	99.85	64.88
Stratospheric ozone depletion	kg CFC11 eq	0.0054	0.0	0.10	0.09
Terrestrial acidification	kg SO ₂ eq	6.60	6.9	118.86	83.20
Terrestrial ecotoxicity	kg 1,4-DCB	92231.9	137393.4	1660173.52	1648721.18
Water consumption	m³	424.33	500.1	7637.90	6001.66
Endpoint impacts					
Human Health	DALY	5.63E-03	6.38E-03	0.10	0.077
Ecosystems	species.yr	1.98E-05	2.39E-05	0.00036	0.00029
Resources	USD2013	55.29	41.75	995.1	501.0