

Supplementary material

Table S1. Field ground truth points by watershed, considering site and soil features in Patagonia, Argentina.

Watershed 1. Field ground truth points produced in this work. Site features.

Sample number	Depth (cm)	Latitude (decimal)	Longitude (decimal)	Altitude (masl)	Aspect (°)	Slope (%)	Stoniness (%)	Vegetation type	% of vegetation cover	Predominant species
8971-	0-20	-43,135794	-71,160558	746	SE	<20	5	Herbaceous steppe	100	<i>Acaena</i> sp. <i>Poa</i> sp., <i>Festuca</i> sp., annual herbs
8972	20-40									
8987	0-20	-43,108731	-71,030915	712	NE-E	<12	5	Subshrub steppe	80	<i>Stipa</i> spp., <i>Mulinum spinosum</i> , <i>Festuca</i> sp., <i>Senecio</i> sp.
8988	20-50									
8977	0-20	-43,448593	-70,879654	685	NO	<20	0	Subshrub steppe	60	<i>Stipa humilis</i> , <i>S. spinossisima</i> , <i>Nassauvia</i> sp., <i>Senecio</i> sp.
8978	20-40						10			
8979	0-20	-43,177248	-71,108989	707			85	Herbaceous steppe	85	<i>Stipa</i> sp., <i>Mulinum spinosum</i> , <i>Acaena</i> sp., <i>Nassauvia</i> sp.
8980	20-40									
8989	0-20	-43,166461	-71,079945	693		<12	5	Herbaceous steppe	75	<i>Stipa</i> sp., <i>Mulinum spinosum</i> , <i>festuca</i> , <i>Senecio</i> sp.
8990	20-40									
8991	0-20	-43,167635	-70,828703	613		<12	0	Subshrub steppe	40	<i>Stipa humilis</i> , <i>S. spinossisima</i> , <i>Nassauvia</i> sp., <i>Senecio</i> sp.
8992	20-40									
8981	0-20	-43,476553	-70,865237	666	NE-E	<12	60		70	<i>Stipa</i> sp., <i>Nassauvia</i> sp., perennial herbs

8982	20-30							Herbaceous steppe, subshrub		
8993	0-20	-43,177336	-70,834098	625		<12	-	-	-	-
8994	20-30									
8995	0-20	-43,096814	-71,050976	656	SO	<20	0	Grassy steppe	80	<i>Adesmia volckmannii</i> , <i>Acaena</i> sp., <i>Distichlis</i> sp., <i>Berberis</i> sp.
8996	20-50									
8997	0-20	-43,123694	-71,010564	688	O	<12	0	Subshrub steppe	75	<i>Stipa</i> sp., <i>Mulinum spinosum</i> , <i>Festuca</i> sp., <i>Senecio</i> sp.
8998	20-50									
8983	0-20	-43,448052	-70,875961	662	NE-E	<12	0	Shrub steppe	80	<i>Schinus odonellii</i> , <i>Nassauvia</i> sp., <i>Stipa humilis</i> , <i>Adesmia volckmannii</i> , <i>Berberis</i> sp.
8984	20-40									
8973	0-20	-43,410128	-70,851883	657	O	<12	0	Herbaceous steppe, subshrub	50	<i>Nassauvia</i> sp., <i>Poa</i> sp., <i>Mulinum spinosum</i> , annual herbs
8974	20-40									
8999	0-20	-43,087424	-70,987656	622	S	<12	50	Herbaceous steppe	70	<i>Nassauvia</i> sp., <i>Adesmia volckmannii</i> , <i>Festuca</i> sp., <i>Poa</i> sp.
9000	20-40									
9001	0-20	-43,09265	-71,00351	642		<12	10	Grassy glade	70	Alfilerillo, <i>Senecio</i> sp., <i>Verbascum thapsus</i> , <i>Festuca</i> sp.
9002	20-50									
8985	0-20	-43,150628	-71,079616	685		<12	0	Herbaceous steppe	65	<i>Mulinum spinosum</i> , <i>Senecio</i> sp., <i>Acaena</i> sp., <i>Rumex acetosella</i>
8986	20-50									

Supplementary tables to the article: Salgado-Salomón, ME; Pildain, MB; Mohr-Bell, S; García-Barreda, S; Barroetaveña, C (2025). Mapping suitability for *Tuber melanosporum* growing in Patagonia, Argentina - an opportunity for agriculture diversification. *Forest Systems*, Volume 34, Issue 3, 21006. <https://doi.org/10.5424/fs/2025343-21006>

8975	0-20	-43,318675	-70,899822	664	NO	<12	15	Herbaceous steppe	95	<i>Stipa</i> sp.
8976	20-40									
9003	0-20	-43,5309845	-71,4740115	468	NE	<20	10	Bosque de cipres	25	<i>Austrocedrus chilensis</i> , <i>Rosa eglanteria</i> , grass
9004	20-40									
9005	0-20	-43,5279872	-71,5451912	366	N	<20	0	Shrubland	80	<i>Discaria chacaye</i> , <i>Rosa eglanteria</i> , grass
9006	20-40									
9009	0-20	-43,0072082	-71,4785315	596		<20		Herbaceous steppe	40	<i>Maitenus</i> sp., <i>Gaultheria mucronata</i> , <i>Austrocedrus chilensis</i> , <i>Stipa</i> sp., <i>Mulinum spinosum</i>
9010	20-40									
9007	0-20	-43,1253241	-71,5258532	351	NE	<12	0	Pastureland	100	Grasslands
9008	20-40									

Abbreviations: masl: meter above sea level

Watershed 1. Field ground truth points produced in this work. Soil features.

Sample number	% clay	% silt	% sand	Textural class	pH 1:2,5	EC (dS/m)	% OM	% OC	% total N	C/N	Aval. P (mg/kg)	K (meq/100g)	Ca (meq/100g)	Mg (meq/100g)	Na (meq/100g)	ECC (me/100g)	PSI	Salinity- Sodicity	Truffle suitability	Limiting factor
8971	2,2	34,7	63,1	sandy loam	6,46	0,036	10,5	6,1	0,307	20	38							No saline, nor sodic	Suitable	pH
8972	3,4	32,8	63,8	sandy loam	6,48	0,035	8,8	5,1				1,7	22,5	8,5	1,4	43	3	No saline, nor sodic	Suitable	pH
8987	1,2	13,3	85,5	sandy loam	6,92	0,044	2,3	1,3	0,070	19	23							No saline, nor sodic	Suitable	pH
8988	1,2	8,5	90,3	sandy	7,03	0,046	2,0	1,2				0,8	8,0	4,8	0,6	24	2	No saline, nor sodic	Suitable	pH
8977	27,8	15,6	70,4	sandy loam	7,48	0,044	1,9	1,1				0,7	8,5	14,0	1,3	25	5	No saline, nor sodic	Suitable	
8978	7,9	20,0	72,1	sandy loam	7,31	0,043	2,9	1,7	0,056	31	20							No saline, nor sodic	Suitable	
8979	1,7	9,4	88,9	sandy	6,63	0,008	2,0	1,1	0,058	20	12							No saline, nor sodic	Suitable	pH
8980	2,9	10,6	86,5	sandy loam	6,60	0,030	2,4	1,4				0,6	12,0	12,5	0,7	22	3	No saline, nor sodic	Suitable	pH
8989	9,4	25,4	65,2	sandy loam	6,77	0,057	3,8	2,2	0,091	24	22							No saline, nor sodic	Suitable	pH
8990	6,8	22,6	70,6	sandy loam	6,96	0,049	2,8	1,6				1,1	14,3	2,0	0,8	40	2	No saline, nor sodic	Suitable	pH
8991	4,4	12,3	83,3	sandy loam	6,88	0,033	2,2	1,3	0,043	29	14							No saline, nor sodic	Suitable	pH
8992	4,4	9,3	86,3	sandy loam	7,19	0,060	1,6	0,9				0,7	12,3	5,3	0,7	23	3	No saline, nor sodic	Suitable	pH
8981	8,6	28,2	63,2	sandy loam	7,67	0,099	6,0	3,5	0,184	19	44							No saline, nor sodic	Poor suitable	Shallow
8982	4,9	28,2	67,0	sandy loam	7,65	0,118	5,2	3,0				1,1	18,8	5,8	0,9	43	2	No saline, nor sodic	Poor suitable	Shallow

8993	11,9	21,2	66,9	sandy loam	7,02	0,089	3,1	1,8	0,081	23	39							No saline, nor sodic	Poor suitable	pH, excessive drainage
8994	14,3	20,4	65,3	sandy loam	7,03	0,106	3,3	1,9				0,9	15,0	8,0	0,9	37	2	No saline, nor sodic	Poor suitable	pH, excessive drainage
8995	8,3	40,2	51,5	loam	6,74	0,073	6,1	3,6	0,210	17	48							No saline, nor sodic	Suitable	pH
8996	6,9	33,2	59,9	sandy loam	6,80	0,070	2,7	1,6				2,0	18,0	3,5	0,8	38	2	No saline, nor sodic	Suitable	pH
8997	4,8	19,6	75,5	sandy loam	6,77	0,031	3,1	1,8	0,055	32	18							No saline, nor sodic	Suitable	pH
8998	4,9	19,8	75,4	sandy loam	6,90	0,050	1,9	1,1				1,0	10,5	3,5	0,7	25	3	No saline, nor sodic	Suitable	pH
8983	11,1	30,9	58,0	sandy loam	7,46	0,109	2,6	1,5	0,070	22	18							No saline, nor sodic	Suitable	
8984	14,9	32,4	52,7	sandy loam	7,53	0,116	2,7	1,5				1,0	21,5	6,3	1,0	39	2	No saline, nor sodic	Suitable	
8973	4,1	6,4	89,5	sandy	7,38	0,034	1,9	1,1	0,030	36	19							No saline, nor sodic	Poor suitable	excessive drainage
8974	2,9	8,2	88,9	sandy	7,39	0,032	1,7	1,0				0,9	6,8	2,8	0,8	19	4	No saline, nor sodic	Poor suitable	excessive drainage
8999	2,4	20,5	77,0	sandy loam	6,73	0,040	2,8	1,6	0,046	36	15							No saline, nor sodic	Suitable	pH
9000	2,4	19,2	78,3	sandy loam	6,89	0,035	3,0	1,7				0,6	10,3	5,5	0,8	24	3	No saline, nor sodic	Suitable	pH
9001	1,2	21,9	76,9	sandy loam	6,88	0,043	3,1	1,8	0,049	36	45							No saline, nor sodic	Suitable	pH
9002	2,4	21,4	76,1	sandy loam	6,94	0,052	2,7	1,6				1,1	9,0	6,0	0,8	25	3	No saline, nor sodic	Suitable	pH
8985-	2,4	16,4	81,2	sandy loam	6,92	0,028	2,6	1,5	0,064	23	7							No saline, nor sodic	Suitable	pH
8986	3,6	15,1	81,2	sandy loam	6,84	0,041	2,4	1,4				1,0	8,0	3,0	0,8	26	3	No saline, nor sodic	Suitable	pH
8975	47,5	14,1	38,4	clayey	7,52	0,327	4,9	2,8	0,097	29	23							No saline, nor sodic	Poor suitable	clay texture

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8976	48,0	14,5	37,5	clayey	8,23	0,319	4,0	2,3				0,8	39,5	23,3	2,6	56	5	No saline, nor sodic	Poor suitable	clay texture
9003	1,3	39,1	59,6	sandy loam	6,02	0,018	9,5	5,5	0,291	19	5							No saline, nor sodic	Suitable	pH
9004	3,3	20,9	75,7	sandy loam	6,01	0,025	4,8	2,8				1,4	17,8	7,3	0,8	66	1	No saline, nor sodic	Suitable	pH
9005	41,6	32,5	25,8	clayey	6,30	0,051	4,8	2,8	0,059	47	6							No saline, nor sodic	Poor suitable	clay texture
9006	60,7	26,4	12,9	clayey	6,02	0,193	4,5	2,6				0,5	16,0	4,0	0,8	38	2	No saline, nor sodic	Poor suitable	clay texture
9009-	2,9	38,5	58,6	sandy loam	6,55	0,047	6,1	3,6	0,148	24	6							No saline, nor sodic	Suitable	pH
9010	1,7	34,4	63,9	sandy loam	6,51	0,102	6,3	3,6				1,7	13,8	2,8	0,7	32	2	No saline, nor sodic	Suitable	pH
9007	11,5	36,3	52,2	loam	6,35	0,092	7,0	4,1	0,047	87	19							No saline, nor sodic	Suitable	pH
9008	12,4	28,9	58,6	sandy loam	6,34	0,094	4,8	2,8				0,5	19,0	6,8	0,8	67	1	No saline, nor sodic	Suitable	pH

Abbreviations: EC: electrical conductivity, OM: organic matter; OC: organic carbon; C/N: soil carbon nitrogen proportion; ECC: exchangeable cation capacity; PSI: percentage of exchangeable sodium

Watershed 2. Field ground truth points produced in this work. Site features.

Sample number	Detph (cm)	Latitude (decimal)	Longitude (decimal)	Altitude (masl)	Aspect	Slope (%)	Stoniness (%)	Vegetation type	% of vegetation cover	Predominant species
9047	0-20	-43,40128	-65,972884	90	Flat	<12	30	Xerophytic shrublands	35	<i>Atriplex lampa</i> , <i>Larrea divaricata</i> y <i>Chuquiraga avellanadae</i>
9048	20-40						0			
9063	0-20	-43,57446	-66,120547	79	N-NE	<12	30	Xerophytic shrublands	30	<i>Larrea divaricata</i> , <i>Atriplex lampa</i> y <i>Condalia microphylla</i>
9064	20-40						0			
9061	0-20	-43,4509	-65,891721	78	Flat	<12	10	Xerophytic shrublands	40	<i>Stipa</i> sp., <i>Larrea divaricata</i> y <i>Condalia microphylla</i>
9062	20-40						0			
9049	0-20	-43,34838	-65,913714	96	Flat	<12	20	Xerophytic shrublands	40	<i>Larrea divaricata</i> , <i>Stipa</i> sp., <i>Chuquiraga avellanadae</i>
9050	20-40						0			
9017	0-20	-43,30919	-65,262408	41	Flat	<12	0	Xerophytic shrublands	0	<i>Atriplex lampa</i>
9018	20-40									
9045	0-20	-43,32909	-65,192302	40	Flat	<12	0	Xerophytic shrublands	30	<i>Chuquiraga avellanadae</i> , <i>Prosopis alpataco</i>
9046	20-40									
9019	0-20	-43,29828	-65,276231	11	Flat	<12	0	Xerophytic shrublands	25	<i>Atriplex lampa</i> , grass
9020	20-40									
9043	0-20	-43,28143	-65,598202	36	Flat	<12	20	Xerophytic shrublands	40	<i>Stipa</i> sp., <i>Larrea divaricata</i> , <i>Condalia microphylla</i>
9044	20-40						0			
9041	0-20	-43,32008	-65,295713	15	Flat	<12	0	Xerophytic shrublands	40	<i>Atriplex lampa</i> , <i>Larrea divaricata</i> , <i>Chuquiraga avellanadae</i>
9042	20-40									
9067	0-20	-43,51548	-66,036555	53	Flat	<12	0	Xerophytic shrublands	30	<i>Lycium chilense</i> , <i>Atriplex lampa</i>
9068	20-40									
9039	0-20	-43,3583	-65,508184	59	Flat	<12	20	Xerophytic shrublands	40	<i>Atriplex lampa</i> , <i>Larrea divaricata</i> , <i>Chuquiraga avellanadae</i>
9040	20-40						0			
9057	0-20	-43,47213	-65,923449	85	Flat	<12	80	Xerophytic shrublands	35	<i>Atriplex lampa</i> , <i>Larrea divaricata</i> , <i>Chuquiraga avellanadae</i>
9058	20-40						20			
9065	0-20	-43,53327	-66,078081	88	Flat	<12	50	Xerophytic shrublands	20	<i>Larrea divaricata</i> , <i>Atriplex lampa</i> y <i>condalia microphylla</i>
9066	20-40						0			
9055	0-20	-43,55321	-66,100984	94	Flat	<12	80	Xerophytic shrublands	20	<i>Larrea divaricata</i> , <i>Atriplex lampa</i> , <i>Condalia microphylla</i>
9056	20-40						40			
9037	0-20	-43,31228	-65,830181	88	Flat	<12	30	Xerophytic shrublands	40	<i>Stipa</i> sp., <i>Larrea divaricata</i> , <i>Condalia microphylla</i>
9038	20-40						0			
9025	0-20	-43,33015	-65,271032	72	Flat	<12	0	Xerophytic shrublands	40	<i>Stipa</i> sp., <i>Chuquiraga avellanadae</i>

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9026	20-40									
9015	0-20	-43,34346	-65,851339	50	Flat	<12	30	Xerophytic shrublands	20	<i>Atriplex lampa</i> , <i>Larrea divaricata</i> , <i>Chuquiraga avellanadae</i>
9016	20-40						0			
9027	0-20	-43,53396	-66,281673	216	Flat	<12	20	Xerophytic shrublands	40	<i>Condalia microphylla</i> , <i>Larrea divaricata</i> , <i>Chuquiraga avellanadae</i>
9028	20-40						0			
9029	0-20	-43,36933	-65,507079	96	Flat	<12	5	Xerophytic shrublands	40	<i>Chuquiraga avellanadae</i> , <i>Larrea divaricata</i> , <i>Stipa</i> sp.
9030	20-40						0			
9059	0-20	-43,49812	-65,976154	59	Flat	<12	0	Xerophytic shrublands	10	<i>Atriplex lampa</i>
9060	20-40									
9021	0-20	-43,27835	-65,473377	49	Flat	<12	20	Xerophytic shrublands	60	<i>Stipa</i> sp., <i>Larrea divaricata</i> , <i>Condalia microphylla</i>
9022	20-40						0			
9033	0-20	-43,56311	-66,371734	233	Flat	<12	20	Xerophytic shrublands	50	<i>Condalia microphylla</i> , <i>Larrea divaricata</i> , <i>Chuquiraga avellanadae</i>
9034	20-40						0			
9053	0-20	-43,31561	-65,15452	17	Flat	<12	30	Xerophytic shrublands	50	<i>Chuquiraga avellanadae</i> , <i>Condalia microphylla</i> , <i>Stipa</i> sp.
9054	20-40						0			
9031	0-20	-43,51014	-66,215696	158	S	<12	50	Xerophytic shrublands	40	<i>Chuquiraga avellanadae</i> , <i>condalia microphylla</i> y <i>stipa</i> sp.
9032	20-40						0			
9023	0-20	-43,36024	-65,639907	67	N	>12	0	Xerophytic shrublands	30	<i>Stipa</i> sp., <i>Chuquiraga avellanadae</i>
9024	20-40									
9069	0-20	-43,69923	-66,414992	240	N-NE	<12	70	Xerophytic shrublands	30	<i>Condalia microphylla</i> , <i>Larrea divaricata</i> , <i>Schinus odonellii</i> , <i>Stipa</i> sp.
9070	20-40									
9071	0-20	-43,49846	-65,977166	61	E-SE	<12	40	Xerophytic shrublands	20	<i>Larrea divaricata</i> , <i>Adesmia volckmannii</i>
9013	0-20	-43,34467	-65,84878	35	Flat	<12	0	Xerophytic shrublands	80	Grass
9014	20-40									
9035	0-20	-43,36182	-65,895975	44	N	<12	0	Xerophytic shrublands	20	<i>Atriplex lampa</i> , <i>Larrea divaricata</i> , <i>Chuquiraga avellanadae</i>
9036	20-40									
9051	0-20	-43,38269	-65,760998	31	Flat	<12	0	Xerophytic shrublands	80	<i>Lycium chilense</i> , <i>Condalia microphylla</i> , grass
9052	20-40									

Abbreviations: masl: meter above sea level

Watershed 2. Field ground truth points produced in this work. Soil features.

Sample number	Depth (cm)	% clay	% silt	% sand	Textural class	pH 1:2,5	EC (dS/m)	% OM	% OC	% N total	C/N	P available (mg/kg)	K (meq/100g)	Ca (meq/100g)	Mg (meq/100g)	Na (meq/100g)	ECC (meq/100g)	PSI	Salinity-Sodicity	HCl reaction	Truffle suitability	Limiting factor
9047	0-20	11,0	25,1	63,9	sandy loam	9,42	0,509	2,4	1,4	0,034	41	1							No saline, nor sodic	+	Non suitable	Sodic
9048	20-40	30,3	9,2	60,5	sandy clay loam	9,39	1,031	2,8	1,6				0,5	40,5	2,0	19,4	32	62	Saline and sodic	+	Non suitable	pH
9063	0-20	3,1	24,8	72,1	sandy loam	8,15	0,078	0,9	0,5	0,010	51	3							No saline, nor sodic	-	Poor suitable	Sodic
9064	20-40	8,1	26,7	65,2	sandy loam	7,99	0,114	2,0	1,2				0,6	15,2 5	2,3	18,3	38	48	No saline, nor sodic	-	Poor suitable	Sodic
9061	0-20	17,9	26,8	55,2	sandy loam	8,12	0,176	2,4	1,4	0,040	35	7							No saline, nor sodic	-	Suitable	
9062	20-40	22,0	20,8	57,2	sandy clay loam	8,68	0,234	2,5	1,4				0,5	42,5	3,5	3,2	41	8	No saline, nor sodic	+	Suitable	
9049	0-20	8,4	26,9	64,7	sandy loam	9,13	0,263	2,8	1,6	0,032	51	1							No saline, nor sodic	+	Poor suitable	Sodic
9050	20-40	18,2	14,2	67,6	sandy loam	9,27	0,622	1,0	0,6				0,6	43,5	3,5	14,9	31	48	No saline, nor sodic	+	Poor suitable	Sodic
9017	0-20	3,5	32,8	63,8	sandy loam	9,14	0,749	2,8	1,6	0,089	18	21							No saline, nor sodic	Slightly +	Poor suitable	Sodic
9018	20-40	10,8	27,3	62,0	sandy loam	9,38	0,641	2,1	1,2				1,3	36,5	6,5	19,4	44	45	No saline, sodic	+	Poor suitable	Sodic
9045	0-20	3,3	18,1	78,6	loam sand	7,00	0,102	1,6	1,0	0,030	32	14							No saline, slightly sodic	-	Suitable	pH, excessive drainage
9046	20-40	11,9	15,9	72,2	sandy loam	8,08	0,383	2,0	1,1				0,7	10,0	5,0	4,5	19	24	No saline, slightly sodic	-	Suitable	

9019	0-20	24,0	40,1	35,9	loam	9,66	2,320	3,9	2,2	0,065	35	12							Saline and sodic	-	Poor suitable	Sodic
9020	20-40	31,0	31,1	37,9	clay loam	8,50	3,390	2,5	1,5				1,0	17,5	10,5	26,9	50	54	Saline and sodic	-	Poor suitable	Sodic
9043	0-20	3,3	16,1	80,6	loam sand	7,29	0,048	1,4	0,8	0,026	31	20							No saline, slightly sodic	-	Suitable	excessive drainage, pH
9044	20-40	5,8	21,1	73,2	sandy loam	8,37	0,138	1,6	0,9				1,7	11,5	8,5	4,2	22	20	No saline, slightly sodic	-	Suitable	
9041	0-20	6,7	26,2	67,1	sandy loam	9,53	0,434	2,5	1,5	0,038	39	2							No saline, sodic	+	Non Suitable	Sodic
9042	20-40	6,7	26,2	67,0	sandy loam	9,66	0,655	2,6	1,5				2,0	34,5	6,5	12,0	14	89	No saline, sodic	+	Non Suitable	Sodic
9067	0-20	25,4	53,9	20,7	loamy silt	8,60	0,131	3,8	2,2	0,057	38	21							No saline, sodic	+	Poor suitable	Sodic
9068	20-40	34,2	48,3	17,5	silty clay loam	8,22	3,970	3,4	2,0				3,3	47	3,0	21,7	61	36	Saline and sodic	+	Poor suitable	Sodic
9039	0-20	5,8	11,6	82,7	loam sand	9,01	0,186	1,5	0,9	0,022	40	9							No saline, sodic	+	Non Suitable	Sodic
9040	20-40	11,5	11,3	77,1	sandy loam	9,38	0,299	2,2	1,3				3,1	39,0	6,5	16,6	19	89	No saline, sodic	+	Non Suitable	Sodic
9057	0-20	7,0	19,0	74,0	sandy loam	8,84	0,177	2,1	1,2	0,037	32	7							No saline, nor sodic	-	Suitable	pH
9058	20-40	18,2	17,3	64,4	sandy loam	8,89	0,640	2,0	1,2				1,1	45,5	3,0	2,3	39	6	No saline, nor sodic	+	Suitable	pH
9065	0-20	10,5	21,6	67,9	sandy loam	8,11	0,119	2,0	1,2	0,072	16	6							No saline, sodic	-	Poor suitable	Slightly sodic
9066	20-40	23,0	15,0	62,0	sandy clay loam	9,00	0,361	1,8	1,1				1,0	45,5	9,5	10,9	33	33	No saline, sodic	+	Poor suitable	pH, sodic
9055	0-20	13,1	14,0	72,9	sandy loam	8,57	0,247	1,5	0,9	0,038	22	4							No saline, sodic	-	Poor suitable	Slightly sodic

9056	20-40	33,1	12,4	54,5	sandy clay loam	8,58	2,420	2,6	1,5				0,5	36,5	11,0	17,7	47	37	Saline and sodic	+	Poor suitable	Slightly sodic
9037	0-20	11,7	19,5	68,8	sandy loam	9,35	0,871	3,1	1,8	0,055	32	0							No saline, sodic	+	Non Suitable	Sodic
9038	20-40	19,2	14,7	66,1	sandy loam	9,37	1,834	3,1	1,8				2,8	34,0	5,3	24,0	23	104	Saline and sodic	+	Non Suitable	Sodic
9025	0-20	5,8	27,3	66,9	sandy loam	7,75	0,145	2,5	1,5	0,034	43	15							No saline, nor sodic	-	Suitable	
9026	20-40	3,3	31,0	65,7	sandy loam	8,31	0,141	2,9	1,7				4,1	18,0	5,5	3,2	34	9	No saline, nor sodic	-	Suitable	pH
9015	0-20	8,6	36,9	54,4	sandy loam	8,69	1,400	3,0	1,8	0,041	43	16							Saline and sodic	Slightly +	Non Suitable	Sodic
9016	20-40	33,5	21,1	45,4	sandy clay loam	8,82	3,510	3,0	1,8				0,8	39,0	8,5	26,9	41	66	Saline and sodic	+	Non Suitable	Sodic
9027	0-20	26,2	25,0	48,7	sandy clay loam	9,22	0,864	3,6	2,1	0,045	46	0							No saline, sodic	+	Poor suitable	Sodic
9028	20-40	25,4	24,3	50,3	sandy clay loam	9,05	1,533	3,3	1,9				1,1	41,5	10,0	24,6	44	55	Saline and sodic	+	Poor suitable	Sodic
9029	0-20	2,1	14,8	83,1	loam sand	8,23	0,098	1,6	0,9	0,036	26	7							No saline, nor sodic	-	Suitable	Excessive drainage
9030	20-40	3,3	13,2	83,5	Loam san	8,88	0,099	1,6	0,9				2,1	12,0	3,0	1,5	24	6	No saline, nor sodic	+	Suitable	Excessive drainage
9059	0-20	8,2	19,5	72,4	sandy loam	8,76	0,195	1,6	0,9	0,029	31	6							No saline, sodic	+	Poor suitable	Sodic
9060	20-40	18,3	39,9	41,8	loam	9,47	0,355	2,3	1,3				1,2	34,5	3,0	16,6	45	37	No saline, sodic	+	Poor suitable	Sodic
9021	0-20	6,0	30,6	63,4	sandy loam	8,81	0,480	2,9	1,7	0,047	36	17							No saline, sodic	Slightly +	Poor suitable	Sodic
9022	20-40	10,8	30,2	59,0	sandy loam	8,79	1,522	3,3	1,9				0,2	37,0	7,0	16,6	41	40	Saline and sodic	+	Poor suitable	Sodic
9033	0-20	4,5	16,5	79,0	loam sand	8,34	0,109	1,6	0,9	0,045	21	0							No saline, nor sodic	+	Suitable	Excessive drainage

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9034	20-40	5,8	15,4	78,9	loam sand	8,64	0,158	1,4	0,8				0,5	30,0	8,5	2,5	15	17	No saline, slightly sodic	+	Suitable	Slightly sodic
9053	0-20	11,4	32,7	55,9	sandy loam	8,20	2,580	3,0	1,8	0,041	43	5							Saline and sodic	-	Poor suitable	Sodic
9054	20-40	20,0	30,5	49,6	loam	8,64	3,640	3,1	1,8				2,3	39,5	6,5	24,0	47	51	Saline and sodic	+	Poor suitable	Sodic
9031	0-20	23,4	20,5	56,1	sandy clay loam	8,68	0,257	2,8	1,6	0,035	46	0							No saline, nor sodic	Slightly +	Suitable	
9032	20-40	23,1	14,1	62,9	sandy clay loam	8,92	0,237	2,3	1,3				1,1	37,5	5,0	3,8	29	13	No saline, nor sodic	+	Suitable	pH
9023	0-20	0,9	21,1	78,0	loam sand	8,30	0,201	3,9	2,3	0,030	75	7							No saline, nor sodic	Slightly +	Suitable	Excessive drainage
9024	20-40	0,9	18,0	81,2	loam sand	8,49	0,265	3,8	2,2				0,4	33,0	2,0	2,1	32	7	No saline, nor sodic	+	Suitable	Excessive drainage
9069	0-20	1,8	35,4	62,8	sandy loam	8,62	0,162	3,0	1,8	0,064	28	17							No saline, sodic	-	Suitable	Sodic
9070	20-40	9,2	26,8	64,1	sandy loam	8,45	0,885	3,3	1,9				1,1	30,5	1,5	9,7	39	25	No saline, slightly sodic	Slightly +	Suitable	Sodic
9071	0-20	4,2	10,0	85,8	loam sand	7,61	0,077	0,7	0,4	0,017	25	8	0,5	12,3	5,8	4,4	20	22	No saline, slightly sodic	-	Suitable	Excessive drainage
9013	0-20	34,9	31,2	33,9	clay loam	7,40	1,013	5,4	3,2	0,152	21	4							Slightly saline, non sodic	-	Suitable	pH
9014	20-40	28,2	15,9	55,9	sandy clay loam	7,68	0,390	2,9	1,7				1,5	21,0	6,0	2,1	40	5	No saline, nor sodic	-	Suitable	pH
9035	0-20	8,1	34,6	57,3	sandy loam	9,41	1,344	1,7	1,0	0,032	30	0							Saline and sodic	+	Suitable	Slightly sodic
9036	20-40	8,1	37,1	54,8	sandy loam	8,55	2,110	2,0	1,2				0,4	30,5	2,5	4,2	14	29	Saline and sodic	+	Suitable	Slightly sodic

9051	0-20	17,1	47,5	35,4	loam	8,61	20,70	4,2	2,4	0,087	28	37							Saline and sodic	Slightly +	Non Suitable	Strongly saline, sodic
9052	20-40	33,6	49,4	17,0	sandy clay loam	8,39	15,33	4,0	2,3				3,5	31,5	6,0	54,8	64	86	Saline and sodic	+	No Suitable	Strongly saline, sodic

Abbreviations: EC: electrical conductivity, OM: organic matter; OC: organic carbon; C/N: soil carbon nitrogen proportion; ECC: exchangeable cation capacity; PSI: percentage of exchangeable sodium; HCl reaction: It is an indicator of the presence of carbonates

Watershed 3. Field ground truth points produced in this work. Site features.

Sample number	Depth (cm)	Latitude (°)	Longitude (°)	Altitude (masl)	Aspect (°)	Vegetation type	% vegetation cover	Predominant species	Slope (°)	Stoniness (%)
9158	0-20	-45,455931	-69,820564	474	Flat	Subshrub steppe	80	<i>Stipa</i> sp., <i>Mulinum spinosum</i>	<20	40
9159	20-40									
9160	0-20			508	Flat	Subshrub steppe	60	<i>Stipa</i> sp., <i>Mulinum spinosum</i>		40
9167	0-20	-45,648018	-70,292178	517	Flat	Subshrub steppe	50	<i>Stipa</i> sp., <i>Mulinum spinosum</i>	<20	50
9168-	0-20	-45,454191	-69,783014	484	E-NE	Subshrub steppe	60	<i>Stipa</i> sp., <i>Mulinum spinosum</i>	<20	10
9169	20-40									
9170	0-20	-44,918039	-70,176214	526	E-NE	Subshrub steppe	80	<i>Stipa</i> sp., <i>Mulinum spinosum</i>		50
9171	0-20	-44,968954	-70,183833	541	Flat	Subshrub steppe	40	<i>Stipa</i> sp., <i>Mulinum spinosum</i>	<20	20
9172	20-40									
9173	0-20	-45,608842	-69,081036	275	Flat	Subshrub steppe	100	Grass	<20	0
9174	20-40									
9175	0-20	-45,02351	-70,552795	631	Flat	Subshrub steppe	40	<i>Stipa</i> sp., <i>Mulinum spinosum</i>	<20	30
9176	20-30									
9161	0-20	-45,34301	-69,995348	490	Flat	Subshrub steppe	80	<i>Stipa</i> sp., <i>Mulinum spinosum</i>	<20	0
9162	20-40									
9163	0-20	-45,573819	-69,299487	286	Flat	Subshrub steppe	60	<i>Stipa</i> sp., <i>Mulinum spinosum</i>		0
9166	0-20	-44,966995	-70,332655	567	Flat	Subshrub steppe	60	<i>Stipa</i> sp., <i>Mulinum spinosum</i>	<20	10
9165	20-40									
9164	20-40									

9177	0-20	-45,255597	-70,019783	501	Flat	Subshrub steppe	80	<i>Stipa</i> sp., <i>Mulinum</i> <i>spinosum</i>		20
9156	0-20	-45,617959	-70,828444						<20	20
9157	20-40									
9112	0-20								<20	0
9113	20-40									
9114	0-20			278	Flat	Subshrub steppe	80	Grass	<20	60
9115	20-40									
9142	0-20	-45,110008	-70,056852	514	Flat	Subshrub steppe	60	<i>Stipa</i> sp., <i>Mulinum</i> <i>spinosum</i>	<20	30
9143	0-20	-45,189208	-70,059084	508	Flat	Subshrub steppe	60	<i>Stipa</i> sp., <i>Mulinum</i> <i>spinosum</i>		40
9144	20-40									
9116	0-20	-45,423648	-68,98407	265	Flat	Subshrub steppe	40	<i>Stipa</i> sp., <i>Mulinum</i> <i>spinosum</i>	<20	10
9117	20-40									
9145	0-20	-45,204176	-69,215813	373	Flat	Subshrub steppe	50	<i>Stipa</i> sp., <i>Mulinum</i> <i>spinosum</i>		20
9146	20-30									
9147	0-20	-45,964047	-70,558807	647	Flat	Subshrub steppe	60	<i>Stipa</i> sp., <i>Mulinum</i> <i>spinosum</i>	<20	70
91478	20-30									
9149	0-20	-45,225549	-70,052474	503	Flat	Subshrub steppe	60	<i>Stipa</i> sp., <i>Mulinum</i> <i>spinosum</i>	<20	60
9150	20-30									
9151	0-20	-45,59806	-69,180308	277	Flat	Subshrub steppe	60	<i>Stipa</i> sp., <i>Mulinum</i> <i>spinosum</i>	<20	0
9152	20-40									
9153	0-20	-45,956762	-70,609131	654	Flat	Subshrub steppe	70	<i>Stipa</i> sp., <i>Mulinum</i> <i>spinosum</i>	<20	40
9154	0-20	-45,035644	-70,111876	512	SE	Subshrub steppe	40	<i>Stipa</i> sp., <i>Mulinum</i> <i>spinosum</i>		10
9155	20-40									
9120	0-20	-45,274963	-68,984515	304	N-NE	Subshrub steppe	60	<i>Stipa</i> sp., <i>Mulinum</i> <i>spinosum</i>	<20	80
9121	20-40									

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9132	0-20	-45,542172	-69,289584	289	Flat	Subshrub steppe	60	<i>Stipa</i> sp., <i>Mulinum</i> <i>spinosum</i>		30
9133	20-40									
9138	0-20	-45,378037	-68,982789	302	Flat	Subshrub steppe	50	<i>Stipa</i> sp., <i>Mulinum</i> <i>spinosum</i>	<20	10
9139	20-40									
9122	0-20	-45,604312	-70,893491	532	Flat	Subshrub steppe	80	<i>Stipa</i> sp., <i>Mulinum</i> <i>spinosum</i>	<20	0
9123	20-40									
9126	0-20	-45,255659	-68,892016	292	SE	Subshrub steppe	40	<i>Stipa</i> sp., <i>Mulinum</i> <i>spinosum</i>	<20	80
9127	20-40									
9130	0-20	-45,479118	-69,034127	270	Flat	Subshrub steppe	50	<i>Stipa</i> sp., <i>Mulinum</i> <i>spinosum</i>	<20	0
9131	20-40									

Abbreviations: masl: meter above sea level

Watershed 3. Field ground truth points produced in this work. Soil features.

Sample number	Depth (cm)	% clay	% silt	% sand	Textural class	pH 1:2,5	EC (dS/m)	% OM	% OC	Available P (mg/kg)	K (meq/100g)	Ca (meq/100g)	Mg (meq/100g)	Na (meq/100g)	ECC (meq/100g)	PSI	Salinity-Sodicity	Truffle suitability	Limiting factor
9158	0-20	11,1	8,5	80,4	sandy loam	6,52	0,029	1,5	0,9	7							no saline, nor sodic	Poor suitable	pH
9159	20-40	13,5	6,1	80,4	sandy loam	6,37	0,065	1,6	1,0		0,3	11	5	0,4	16	2	no saline, nor sodic	Poor suitable	pH
9160	0-20	7,4	7,8	84,7	loam sand	6,99	0,083	1,6	1,0	24	0,4	10	7,5	0,5	15	3	no saline, nor sodic	Poor suitable	pH
9167	0-20	5,7	10,3	84,1	loam sand	7,35	0,095	2,1	1,2	23	0,4	13	7	0,3	13	2	no saline, nor sodic	Suitable	pH
9168	0-20	7,0	11,0	82,1	loam sand	7,65	0,072	2,5	1,5	1							no saline, nor sodic	Suitable	pH
9169	20-40	10,9	15,0	74,2	sandy loam	8,17	0,158	3,2	1,8		0,9	9,5	1,5	3,5	27	13	no saline, nor sodic	Suitable	pH
9170	0-20	10,5	10,8	78,7	sandy loam	6,75	0,663	1,6	0,9	12	0,6	7,5	2,5	0,3	15	2	no saline, nor sodic	Poor suitable	pH
9171	0-20	5,7	7,2	87,1	loam sand	6,49	0,051	1,7	1,0	10							no saline, nor sodic	Poor suitable	pH
9172	20-40	8,1	5,5	86,4	Loam sand	6,31	0,039	1,9	1,1		0,3	10	6,5	0,3	14	2	no saline, nor sodic	Poor suitable	pH
9173	0-20	18,4	25,0	56,6	sandy loam	10,3	4,430	3,4	2,0	52							Saline and sodic	Poor suitable	Saline and sodic
9174	20-40	19,4	21,6	59,0	sandy loam	10,4	3,710	2,5	1,5		0,7	26	10	25,9	25	102	Saline and sodic	Poor suitable	Saline and sodic
9175	0-20	13,0	7,9	79,1	sandy loam	6,22	0,118	1,9	1,1	12							no saline, nor sodic	Poor suitable	pH
9176	20-30	16,8	11,7	71,5	sandy loam	6,59	0,076	3,1	1,8		0,4	13	8	0,3	16	2	no saline, nor sodic	Poor suitable	pH
9161	0-20	3,8	6,1	90,1	sandy	6,37	0,030	1,5	0,9	15							no saline, nor sodic	Poor suitable	Excessive drainage, pH
9162	20-40	1,8	9,1	89,1	sandy	7,1	0,049	1,8	1,0		0,4	8,5	6	0,3	12	2	no saline, nor sodic	Poor suitable	Excessive drainage
9163	0-20	29,8	22,3	47,8	sandy clay loam	8,31	0,102	2,1	1,2	10							no saline, nor sodic	Suitable	Excessive drainage

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9165	0-20	5,7	2,4	91,9	sandy	6,66	0,038	1,8	1,0	15							no saline, nor sodic	Poor suitable	Excessive drainage, pH
9166	20-40	4,5	4,8	90,7	sandy	7,18	0,040	1,5	0,9		0,5	7,5	10	0,2	9	2	no saline, nor sodic	Poor suitable	Excessive drainage, pH
9163	20-40	20,9	18,1	60,9	sandy clay loam	8,66	0,283	2,9	1,7		1,1	22	3	3,4	30	11	no saline, nor sodic	Suitable	
9177	0-20	10,5	10,3	79,2	sandy loam	6,56	0,053	2,2	1,3	22	0,4	9	2,5	0,3	13	2	no saline, nor sodic	Suitable	pH
9156	0-20	10,0	23,3	66,7	sandy loam	8,23	0,225	5,0	2,9	37							no saline, nor sodic	Suitable	
9157	20-40	12,7	20,6	66,7	sandy loam	8,49	0,227	3,7	2,2		0,6	21	5	0,8	29	3	no saline, nor sodic	Suitable	
9112	0-20	52,3	20,7	27,0	clayey	7,81	2,750	5,5	3,2	17							saline no sodic	Non suitable	Clay texture
9113	20-40	53,6	22,1	24,3	clayey	7,72	3,470	6,7	3,9		0,4	32	24,0	4,7	51	9	Saline, no sodic	Non suitable	Clay texture
9114	0-20	23,6	19,9	56,6	sandy clay loam	7,54	0,243	3,6	2,1	29							no saline, nor sodic	Suitable	pH
9115	20-40	35,8	14,1	50,1	arcillo sandy	7,25	0,237	3,6	2,1		0,8	17	0,5	1,0	36	3	no saline, nor sodic	Suitable	pH
9142	0-20	5,3	3,4	91,2	sandy	6,9	0,065	0,9	0,5	8	0,2	10	7,5	0,4	9	4	no saline, nor sodic	Poor suitable	Excessive drainage, pH
9143	0-20	4,5	7,3	88,2	sandy	6,26	0,030	1,2	0,7	19							no saline, nor sodic	Poor suitable	Excessive drainage, pH
9144	20-40	3,3	7,9	88,8	sandy	6,22	0,052	0,8	0,5		0,4	8,5	2,5	0,2	15	1	no saline, nor sodic	Poor suitable	Excessive drainage, pH
9116	0-20	23,5	30,5	45,9	loam	8,49	0,536	3,3	1,9	24							no saline, nor sodic	Suitable	
9117	20-40	29,2	35,8	35,1	clay loam	8,97	0,716	3,2	1,9		1,2	26	4,5	4,0	36	11	no saline, nor sodic	Suitable	
9145	0-20	10,5	9,7	79,8	sandy loam	7,32	0,054	1,3	0,8	8							no saline, nor sodic	Suitable	pH
9146	20-30	13,1	9,8	77,1	sandy loam	8,14	0,080	1,8	1,0		0,5	13	3,5	1,7	16	10	no saline, nor sodic	Suitable	pH
9147	0-20	5,7	2,5	91,9	sandy	7,96	0,093	0,9	0,5	14							no saline, nor sodic	Poor suitable	Excessive drainage
9148	20-30	3,3	4,3	92,4	sandy	7,07	0,093	1,3	0,7		0,2	13	6,5	0,2	12	2	no saline, nor sodic	Poor suitable	Excessive drainage
9149	0-20	5,7	7,4	87,0	loam sand	7,73	0,035	1,3	0,8	6							no saline, nor sodic	Suitable	pH

Supplementary tables to the article: Salgado-Salomón, ME; Pildain, MB; Mohr-Bell, S; García-Barreda, S; Barroetaveña, C (2025). Mapping suitability for *Tuber melanosporum* growing in Patagonia, Argentina - an opportunity for agriculture diversification. *Forest Systems*, Volume 34, Issue 3, 21006. <https://doi.org/10.5424/fs/2025343-21006>

9150	20-30	8,1	8,0	83,9	loam sand	6,91	0,197	1,7	1,0		0,5	11	6,5	0,7	16	5	no saline, nor sodic	Suitable	pH
9151	0-20	31,8	21,8	46,5	sandy clay loam	6,73	0,222	9,6	5,6	14							no saline, nor sodic	Poor suitable	pH
9152	20-40	41,6	22,7	35,8	clayey	6,99	0,196	7,0	4,0		0,6	25	1	0,7	57	1	no saline, nor sodic	Poor suitable	Clay texture, pH
9153	0-20	8,1	1,6	90,3	sandy	7,96	0,115	1,2	0,7	12	0,3	16	1	3,2	9	34	no saline, sodic	Poor suitable	Excessive drainage, pH
9154	0-20	3,3	7,0	89,7	sandy	5,93	0,047	1,2	0,7	10							no saline, nor sodic	Poor suitable	Excessive drainage, pH
9155	20-40	4,5	7,0	88,5	sandy	6,61	0,060	1,4	0,8		0,3	11	4,5	0,5	12	4	no saline, nor sodic	Poor suitable	Excessive drainage, pH
9120	0-20	10,9	15,8	73,3	sandy loam	8,04	0,198	2,1	1,2	14							no saline, nor sodic	Suitable	
9121	20-40	32,4	16,8	50,8	sandy clay loam	8,18	0,367	3,1	1,8		0,4	18	3,5	1,6	32	5	no saline, nor sodic	Suitable	
9132	0-20	7,3	7,1	85,6	Loam sand	6,73	0,050	2,7	1,6	25							no saline, nor sodic	Suitable	pH
9133	20-40	6,1	8,3	85,6	Loam sand	7,11	0,057	1,8	1,0		1,4	6	6	1,9	12	16	no saline, slightly sodic	Suitable	pH
9138	0-20	25,8	19,5	54,7	sandy clay loam	9,09	0,327	1,8	1,1	12							no saline, nor sodic	Suitable	pH
9139	20-40	29,5	17,2	53,3	sandy clay loam	8,95	0,875	2,0	1,2		0,5	27	6,5	3,0	30	10	no saline, nor sodic	Suitable	pH
9122	0-20	4,0	8,0	88,0	sandy	6,39	0,055	1,7	1,0	12							no saline, nor sodic	Poor suitable	Excessive drainage, pH
9123	20-40	1,6	8,7	89,6	sandy	6,52	0,059	1,7	1,0		0,4	9	5	0,2	14	2	no saline, nor sodic	Poor suitable	Excessive drainage, pH
9126	0-20	14,7	26,4	58,9	sandy loam	8,56	0,389	2,2	1,3	9							no saline, nor sodic	Suitable	
9127	20-40	24,7	23,7	51,6	sandy clay loam	8,96	0,933	2,5	1,5		0,7	24	3	4,5	29	15	Slightly saline and sodic	Suitable	pH
9130	0-20	14,4	27,8	57,8	sandy loam	9,3	0,935	2,1	1,2	11							Saline and sodic	Non suitable	Saline and sodic
9131	20-40	17,4	33,3	49,3	loam	8,72	3,230	2,0	1,2		1,7	38	6,5	22,1	39	57	Saline and sodic	Non suitable	Saline and sodic

Abbreviations: EC: electrical conductivity, OM: organic matter; OC: organic carbon; C/N: soil carbon nitrogen proportion; ECC: exchangeable cation capacity; PSI: percentage of exchangeable sodium; HCl reaction: It is an indicator of the presence of carbonates