Table 2. Differences in SOC as a result of different agricultural management practices. VandenBygaart et al. 2003. Influence of agricultural management on soil organic carbon: A compendium and assessment of Canadian studies. Can. J. Soil Sci. 83:363-380.

Location (by province from west to east)	MAP (mm)	MAT (^{o}C)	PET	Soil Great Group[z]	Textural class	Duration (yrs)	Treatment[x]	Depth sampled (cm)	Soil profiles sampled	SOC control (Mg ha^{-1})	Net C difference (Mg ha^{-1})	C storage rate (g C m^{-2} yr^{-1})	Reference
Summerland, BC	290	9.0	711	BC	LS	4	organic fertilizer	15	8	44.6	3.1	78.7	**Zebarth et al. 1999**
Summerland, BC	290	9.0	711	BC	LS	3	organic fertilizer	15	8	44.6	15.5	515.3	Zebarth et al. 1999
Summerland, BC	290	9.0	711	BC	LS	4	organic fertilizer	15	8	44.6	54.8	1369.3	Zebarth et al. 1999
Lethbridge, AB	402	5.0	732	BC	CL	41	cont. w vs. f-w	30	20	58.3	2.1	5	**Bremer et al. 1994**
Lethbridge, AB	402	5.0	732	BC	CL	41	cont. w vs. f-w	30	20	57.9	3.0	7	Bremer et al. 1994
Lethbridge, AB	402	5.0	732	BC	CL	41	organic fertilizer	30	20	57.8	4.9	12	Bremer et al. 1994
Lethbridge, AB	402	5.0	732	BC	CL	41	hay in rotation	30	20	57.8	6.4	16	Bremer et al. 1994
Bow Island, AB	370	5.0	732	BC	CL	6	f-w-w vs. f-w	30	16	20.2	0.7	12	**Bremer et al. 2002**
Bow Island, AB	370	5.0	732	BC	CL	6	cont. w vs. f-w	30	16	20.2	1.5	25	Bremer et al. 2002
Bow Island, AB	370	5.0	732	BC	CL	6	crested w-grass vs. f-w-w	30	16	20.9	2.3	38	Bremer et al. 2002
Bow Island, AB	370	5.0	732	BC	CL	6	crested w-grass vs. f-w	30	16	20.2	3.0	50	Bremer et al. 2002
Lethbridge, AB	402	5.0	758	DBC	L	9	straw	20	12	42.7	0.2	3	**Dormaar and Carefoot 1998**
Lethbridge, AB	402	5.0	758	DBC	L	9	NT variable rotation	20	12	42.7	8.2	91	Dormaar and Carefoot 1998
Lethbridge, AB	402	5.0	758	DBC	L	9	inorganic fertilizer	20	12	41.5	2.3	25	Dormaar and Carefoot 1998
Lethbridge, AB	402	5.0	758	DBC	L	9	inorganic fertilizer	20	12	20.8	3.0	33	Dormaar and Carefoot 1998
Lethbridge, AB	402	5.0	736	DBC	L	10	organic fertilizer	20	5	38.0	12.0	120	**Dormaar and Sommerfeld 1986**
Lethbridge, AB	402	5.0	736	DBC	L	10	organic fertilizer	20	5	38.0	30.0	300	Dormaar and Sommerfeld 1986
Beaverlodge, AB	468	2.0	568	GL	CL	7	NT variable rotation	20	32	140.4	15.4	221	**Franzluebbers and Arshad 1996**
Lethbridge, AB	402	5.0	777	DBC	CL	4	NT w-sugar beet-legume	30	128	28.3	1.8	45	**Hao et al. 2001**
Lethbridge, AB	402	5.0	736	BC	CL	16	NT f-w	15	30	27.1	2.1	13	**Larney et al. 1997**
Lethbridge, AB	402	5.0	736	BC	CL	16	NT f-w	15	30	27.6	1.6	10	Larney et al. 1997
Lethbridge, AB	402	5.0	736	BC	CL	16	NT f-w	15	30	30.4	-1.2	-8	Larney et al. 1997
Lethbridge, AB	402	5.0	754	BC	CL	8	NT cont. w	15	25	31.0	2.0	25	Larney et al. 1997
Lethbridge, AB	402	5.0	754	BC	CL	9	cont. w vs. f-w (CT)	15	30	38.5	2.8	31	Larney et al. 1997
Lethbridge, AB	402	5.0	739	DBC	CL	24	NT f-w	20	12	37.1	-3.2	-13	**Miller et al. 1999**
Crossfield, AB	450	2.3	646	BlC	N/A[w]	27	inorganic fertilize	30	60	112.9	18.5	68	**Malhi et al. 1997**
Crossfield, AB	450	2.3	646	BlC	N/A	27	inorganic fertilizer	30	60	112.9	23.4	87	Malhi et al. 1997
Crossfield, AB	450	2.3	646	BlC	N/A	27	inorganic fertilizer	30	60	112.9	24.6	91	Malhi et al. 1997
Crossfield, AB	450	2.3	646	BlC	N/A	27	inorganic fertilizer	30	60	112.9	18.4	68	Malhi et al. 1997
Crossfield, AB	450	2.3	641	BlC	L	23	inorganic fertilizer	15	60	71.8	4.0	17	**Malhi et al. 2002**
Crossfield, AB	450	2.3	641	BlC	L	23	inorganic fertilizer	15	60	71.8	3.4	15	Malhi et al. 2002
Breton, AB	547	2.1	580	GL	L	42	inorganic fertilizer	A_p[u]	2[t]	20.3[u]	0.8	2	**Izaurralde et al. 2001**
Breton, AB	547	2.1	580	GL	L	42	organic fertilizer	A_p[u]	2[t]	20.3[u]	7.5	18	Izaurralde et al. 2001
Breton, AB	547	2.1	580	GL	L	42	inorganic fertilizer	A_p[u]	5[t]	32.4[u]	4.7	11	Izaurralde et al. 2001
Breton, AB	547	2.1	580	GL	L	49	inorganic fertilizer	A_p[u]	4[t]	20.3[u]	-0.8	-2	Izaurralde et al. 2001
Breton, AB	547	2.1	580	GL	L	49	organic fertilizer	A_p[u]	4[t]	20.3[u]	9.5	19	Izaurralde et al. 2001
Breton, AB	547	2.1	580	GL	L	49	inorganic fertilizer	A_p[u]	20[t]	34.7[u]	4.7	10	Izaurralde et al. 2001
Breton, AB	547	2.1	580	GL	L	60	inorganic fertilizer	A_p[u]	2[t]	16.6[u]	1.2	2	Izaurralde et al. 2001
Breton, AB	547	2.1	580	GL	L	60	organic fertilizer	A_p[u]	2[t]	16.6[u]	15.2	25	Izaurralde et al. 2001
Breton, AB	547	2.1	580	GL	L	60	inorganic fertilizer	A_p[u]	10[t]	34.7[u]	4.7	8	Izaurralde et al. 2001
Breton, AB	547	2.1	580	GL	L	18	f-w from time 0	A_p[u]	2[t]	21.1[u]	-3.2	-18	Izaurralde et al. 2001
Breton, AB	547	2.1	580	GL	L	11	NT cont. barley	15	40	32.1	5.9	53.4	**Nyborg et al. 1995**
Breton, AB	547	2.1	580	GL	L	11	NT cont. barley	15	40	34.5	7.5	68.2	Nyborg et al. 1995
Breton, AB	547	2.1	580	GL	L	11	NT cont. barley	15	40	30.3	1.8	16.5	Nyborg et al. 1995
Breton, AB	547	2.1	580	GL	L	11	straw	15	40	30.5	1.6	14.1	Nyborg et al. 1995
Breton, AB	547	2.1	580	GL	L	11	straw	15	40	28.7	1.5	14.0	Nyborg et al. 1995
Breton, AB	547	2.1	580	GL	L	11	NT cont. barley	15	40	30.3	0.3	2.5	Nyborg et al. 1995
Ellersie, AB	455	1.9	560	BlC	L	11	NT cont. barley	15	40	88.3	1.8	15.9	Nyborg et al. 1995
Ellersie, AB	455	1.9	560	BlC	L	11	NT cont. barley	15	40	87.8	1.9	17.1	Nyborg et al. 1995
Ellersie, AB	455	1.9	560	BlC	L	11	NT cont. barley	15	40	83.6	0.8	7.4	Nyborg et al. 1995
Ellersie, AB	455	1.9	560	BlC	L	11	straw	15	40	83.6	4.2	38.4	Nyborg et al. 1995
Breton, AB	547	2.1	570	GL	L	12	inorganic fertilizer	15	32	34.9	2.0	16.7	**Solberg et al. 1997**

Breton, AB	547	2.1	570	GL	L	12	inorganic fertilizer	15	32	34.9	7.7	64.2	Solberg et al. 1997
Breton, AB	547	2.1	570	GL	L	12	inorganic fertilizer	15	32	34.9	8.1	67.5	Solberg et al. 1997
Breton, AB	547	2.1	570	GL	L	12	straw	15	32	36.8	-2.8	-23.3	Solberg et al. 1997
Ellersie, AB	455	1.9	580	BlC	L	12	inorganic fertilizer	15	32	146.0	3.0	25.2	Solberg et al. 1997
Ellersie, AB	455	1.9	580	BlC	L	12	inorganic fertilizer	15	32	146.0	4.0	33.7	Solberg et al. 1997
Ellersie, AB	455	1.9	580	BlC	L	12	inorganic fertilizer	15	32	146.0	7.2	59.7	Solberg et al. 1997
Ellersie, AB	455	1.9	580	BlC	L	12	straw	15	32	146.2	-0.2	-1.7	Solberg et al. 1997
Ellersie, AB	455	1.9	580	BlC	L	12	straw	15	32	146.2	-0.2	-1.7	Solberg et al. 1997
Ellersie, AB	455	1.9	580	BlC	L	12	straw	15	32	146.6	2.5	20.7	Solberg et al. 1997
Ellersie, AB	455	1.9	580	BlC	L	12	straw	15	32	148.8	1.2	10.2	Solberg et al. 1997
Ellersie, AB	455	1.9	580	BlC	L	12	straw	15	32	153.0	0.2	1.3	Solberg et al. 1997
Breton, AB	547	2.1	570	GL	L	12	straw	15	32	36.8	-1.9	-15.8	Solberg et al. 1997
Breton, AB	547	2.1	570	GL	L	12	straw	15	32	33.5	3.4	28.3	Solberg et al. 1997
Breton, AB	547	2.1	570	GL	L	12	straw	15	32	38.4	4.2	35.0	Solberg et al. 1997
Breton, AB	547	2.1	570	GL	L	12	straw	15	32	42.7	0.3	2.5	Solberg et al. 1997
Breton, AB	547	2.1	633	GL	SiL	63	legumes in rotation	15	6	17.0	10.0	16	**Grant et al. 2001**
Breton, AB	547	2.1	633	GL	SiL	63	organic fertilizer	15	6	19.0	13.0	21	Grant et al. 2001
Swift Current, SK	358	3.5	684	BC	SiL	16	f-w-w vs. f-w	15	9	32.8	-0.7	-5	**Biederbeck et al. 1984**
Swift Current, SK	358	3.5	684	BC	SiL	16	f-w-w vs. f-w	15	9	32.2	-2.7	-17	Biederbeck et al. 1984
Swift Current, SK	358	3.5	684	BC	SiL	16	flax in rotation	15	9	32.0	-0.4	-2	Biederbeck et al. 1984
Swift Current, SK	358	3.5	684	BC	SiL	16	rye in rotation	15	9	34.8	-1.5	-9	Biederbeck et al. 1984
Swift Current, SK	358	3.5	684	BC	SiL	16	f-w-w vs. f-w	15	9	30.9	0.7	5	Biederbeck et al. 1984
Swift Current, SK	358	3.5	684	BC	SiL	16	oats in rotation	15	9	34.4	-0.2	-1	Biederbeck et al. 1984
Swift Current, SK	358	3.5	684	BC	SiL	16	flax in rotation	15	9	38.1	-2.2	-14	Biederbeck et al. 1984
Swift Current, SK	358	3.5	684	BC	SiL	16	cont. w vs. f-w	15	9	37.3	0.5	3	Biederbeck et al. 1984
Swift Current, SK	358	3.5	684	BC	SiL	16	inorganic fertilizer	15	9	32.2	1.1	7	Biederbeck et al. 1984
Swift Current, SK	358	3.5	693	BC	SiL	6	gm in rotation	10	16	20.4	1.1	18	**Biederbeck et al. 1998**
Swift Current, SK	358	3.5	693	BC	SiL	6	cont. w vs. f-w	10	16	20.4	1.2	21	Biederbeck et al. 1998
Swift Current, SK	358	3.5	683	BC	SL	18	f-w-w vs. f-w	15	6	30.9	0.5	3	**Campbell and Zentner 1993**
Swift Current, SK	358	3.5	683	BC	SL	18	flax in rotation	15	6	31.4	-2.8	-16	Campbell and Zentner 1993
Swift Current, SK	358	3.5	683	BC	SL	18	rye in rotation	15	6	31.4	1.6	9	Campbell and Zentner 1993
Swift Current, SK	358	3.5	683	BC	SL	18	inorganic fertilizer	15	6	31.4	2.9	16	Campbell and Zentner 1993
Swift Current, SK	358	3.5	683	BC	SL	18	legumes in rotation	15	6	34.3	0.9	5	Campbell and Zentner 1993
Swift Current, SK	358	3.5	683	BC	SL	18	cont. w vs. f-w	15	6	30.9	3.4	19	Campbell and Zentner 1993
Swift Current, SK	358	3.5	683	BC	SL	18	cont. w vs. f-w-w	15	6	31.4	2.9	16	Campbell and Zentner 1993
Swift Current, SK	358	3.5	683	BC	SL	18	inorganic fertilizer	15	6	30.2	1.2	7	Campbell and Zentner 1993
Swift Current, SK	358	3.5	671	BC	SiL	12	NT cont. w	7.5	18	14.6	1.3	11	**Campbell et al. 1995a**
Swift Current, SK	358	3.5	671	BC	SiL	12	NT f-w	7.5	18	13.9	0.9	8	Campbell et al. 1995a
Swift Current, SK	358	3.5	671	BC	SiL	12	cont. w vs. f-w	7.5	18	14.8	1.1	9	Campbell et al. 1995a
Stewart Valley, SK	409	4.3	684	BC	CL	11	NT f-w	15	18	24.3	5.2	47	**Campbell et al. 1996a**
Stewart Valley, SK	409	4.3	684	BC	CL	11	NT cont. w	15	18	25.8	2.7	25	Campbell et al. 1996a
Stewart Valley, SK	409	4.3	684	BC	CL	11	cont. w vs. f-w	15	18	29.4	-0.9	-8	Campbell et al. 1996a
Swift Current, SK	358	3.5	671	BC	SL	11	NT f-w	15	18	19.6	0.0	0	**Campbell et al. 1996b**
Swift Current, SK	358	3.5	671	BC	SL	11	NT cont. w	15	18	18.0	1.0	9	Campbell et al. 1996b
Swift Current, SK	358	3.5	671	BC	SL	11	cont. w vs. f-w	15	18	19.0	0.6	6	Campbell et al. 1996b
Indian Head, SK	427	2.5	675	BlC	HC	39	inorganic fertilizer	15	8	30.4	2.0	5	**Campbell et al. 1998**
Indian Head, SK	427	2.5	675	BlC	HC	39	f-w-w vs. f-w	15	8	32.4	3.8	10	Campbell et al. 1998
Indian Head, SK	427	2.5	675	BlC	HC	39	gm in rotation	15	8	33.9	0.0	0	Campbell et al. 1998
Indian Head, SK	427	2.5	675	BlC	HC	39	inorganic fertilizer	15	8	34.3	1.9	5	Campbell et al. 1998
Indian Head, SK	427	2.5	675	BlC	HC	39	hay in rotation	15	8	35.6	2.3	6	Campbell et al. 1998
Indian Head, SK	427	2.5	675	BlC	HC	39	cont. w vs. f-w	15	8	32.4	7.3	19	Campbell et al. 1998
Indian Head, SK	427	2.5	675	BlC	HC	39	inorganic fertilizer	15	8	32.6	7.1	18	Campbell et al. 1998
Indian Head, SK	427	2.5	675	BlC	HC	39	cont. w vs. f-w-w	15	8	32.4	7.3	19	Campbell et al. 1998
Swift Current, SK	358	3.5	676	BC	SL	29	inorganic fertilizer	15	6	30.0	3.4	12	**Campbell et al. 2000a**
Swift Current, SK	358	3.5	676	BC	SL	29	f-w-w vs. f-w	15	6	30.0	2.8	10	Campbell et al. 2000a
Swift Current, SK	358	3.5	676	BC	SL	29	rye in rotation	15	6	30.0	6.9	24	Campbell et al. 2000a
Swift Current, SK	358	3.5	676	BC	L	10	f-w-w from time 0	30	6	29.5	3.9	39	**Campbell et al. 2000b**

Swift Current, SK	358	3.5	676	BC	L	10	f-w-w from time 0	30	6	29.9	1.9	19	Campbell et al. 2000b
Swift Current, SK	358	3.5	676	BC	L	10	f-w-w from time 0	30	6	31.0	2.2	22	Campbell et al. 2000b
Swift Current, SK	358	3.5	676	BC	L	10	gm in rotation	30	6	27.8	4.4	44	Campbell et al. 2000b
Swift Current, SK	358	3.5	676	BC	L	10	f-w-w-w from time 0	30	6	27.3	5.8	58	Campbell et al. 2000b
Swift Current, SK	358	3.5	676	BC	L	10	cont. w from time 0	30	6	29.2	6.0	60	Campbell et al. 2000b
Swift Current, SK	358	3.5	676	BC	L	10	crested w-grass from time 0	30	6	29.4	1.7	17	Campbell et al. 2000b
Indian Head, SK	427	2.5	675	BlC	N/A	10	NT f-w	15	8	28.8	2.6	26	**Campbell et al. 2001a**
Indian Head, SK	427	2.5	675	BlC	N/A	10	NT f-w	15	8	29.1	3.9	39	Campbell et al. 2001a
Indian Head, SK	427	2.5	675	BlC	N/A	10	NT f-w-w	15	8	29.8	-1.8	-18	Campbell et al. 2001a
Indian Head, SK	427	2.5	675	BlC	N/A	10	NT f-w-w	15	8	29.9	5.2	52	Campbell et al. 2001a
Indian Head, SK	427	2.5	675	BlC	N/A	10	NT f-w-w	15	8	28.6	4.9	49	Campbell et al. 2001a
Indian Head, SK	427	2.5	675	BlC	N/A	10	NT gm	15	8	32.5	-1.3	-13	Campbell et al. 2001a
Indian Head, SK	427	2.5	675	BlC	N/A	10	NT f-w-w-hay	15	8	33.6	0.9	9	Campbell et al. 2001a
Indian Head, SK	427	2.5	675	BlC	N/A	10	NT cont. w	15	8	30.8	0.0	0	Campbell et al. 2001a
Indian Head, SK	427	2.5	675	BlC	N/A	10	NT cont. w	15	8	34.5	2.0	20	Campbell et al. 2001a
Swift Current, SK	358	3.5	676	BC	L	32	f-w-w vs. f-w	15	32	54.3	4.8	15	**Campbell et al. 2001b**
Swift Current, SK	358	3.5	676	BC	L	32	f-w-w-w-w-w vs. f-w	15	32	54.3	4.8	15	Campbell et al. 2001b
Swift Current, SK	358	3.5	676	BC	L	32	f-w-w vs. f-w-w-w-w-w	15	32	59.1	0.0	0	Campbell et al. 2001b
Indian Head, SK	427	2.5	657	BlC	N/A	29	inorganic fertilizer	15	12	36.3	1.6	6	**Campbell et al. 1991a**
Indian Head, SK	427	2.5	657	BlC	N/A	29	f-w-w vs. f-w	15	12	36.3	0.1	0	Campbell et al. 1991a
Indian Head, SK	427	2.5	657	BlC	N/A	29	f-w-w vs. f-w	15	12	37.9	0.6	2	Campbell et al. 1991a
Indian Head, SK	427	2.5	657	BlC	N/A	29	gm in rotation	15	12	36.4	3.1	11	Campbell et al. 1991a
Indian Head, SK	427	2.5	657	BlC	N/A	29	gm in rotation	15	12	36.4	3.5	12	Campbell et al. 1991a
Indian Head, SK	427	2.5	657	BlC	N/A	29	hay in rotation	15	12	36.4	5.8	20	Campbell et al. 1991a
Indian Head, SK	427	2.5	657	BlC	N/A	29	hay in rotation	15	12	36.4	5.1	18	Campbell et al. 1991a
Indian Head, SK	427	2.5	657	BlC	N/A	29	cont. w vs. f-w	15	12	36.3	3.3	11	Campbell et al. 1991a
Indian Head, SK	427	2.5	657	BlC	N/A	29	cont. w vs. f-w	15	12	37.9	4.0	14	Campbell et al. 1991a
Indian Head, SK	427	2.5	657	BlC	N/A	30	inorganic fertilizer	15	12	36.4	2.1	7	Campbell et al. 1991a
Indian Head, SK	427	2.5	657	BlC	N/A	30	straw	15	12	38.5	-0.3	-1	Campbell et al. 1991a
Melfort, SK	506	0.8	588	BlC	N/A	31	f-w-w vs. f-w	15	12	62.4	-1.2	-4	**Campbell et al. 1991b**
Melfort, SK	506	0.8	588	BlC	N/A	31	gm in rotation	15	12	62.4	-0.4	-1	Campbell et al. 1991b
Melfort, SK	506	0.8	588	BlC	N/A	31	gm in rotation	15	12	62.4	3.7	12	Campbell et al. 1991b
Melfort, SK	506	0.8	588	BlC	N/A	31	cont. w vs. f-w-w	15	12	61.4	3.9	13	Campbell et al. 1991b
Melfort, SK	506	0.8	588	BlC	N/A	31	cont. w vs. f-w	15	12	62.4	3.0	10	Campbell et al. 1991b
Melfort, SK	506	0.8	588	BlC	N/A	31	inorganic fertilizer	15	12	65.3	0.1	0	Campbell et al. 1991b
Melfort, SK	506	0.8	588	BlC	N/A	31	hay in rotation	15	12	61.4	4.1	13	Campbell et al. 1991b
Melfort, SK	506	0.8	588	BlC	N/A	31	hay in rotation	15	12	61.4	5.2	17	Campbell et al. 1991b
Melfort, SK	506	0.8	588	BlC	N/A	31	hay in rotation	15	12	61.4	2.3	7	Campbell et al. 1991b
Melfort, SK	506	0.8	588	BlC	N/A	31	hay in rotation	15	12	61.2	4.7	15	Campbell et al. 1991b
Melfort, SK	506	0.8	588	BlC	N/A	31	hay in rotation	15	12	61.2	2.3	7	Campbell et al. 1991b
Melfort, SK	506	0.8	588	BlC	N/A	31	hay in rotation	15	12	61.2	0.1	0	Campbell et al. 1991b
Scott, SK	350	0.8		DBC	L	24	f-can-w vs. f-can	7.5	12	35.5	-2.6	-11	**Campbell et al. 1992**
Scott, SK	350	0.8		DBC	L	24	cont w. vs. f-can	7.5	12	35.5	-1.8	-8	Campbell et al. 1992
Scott, SK	350	0.8		DBC	L	24	cont w. vs. f-can-w	7.5	12	32.9	0.8	3	Campbell et al. 1992
Swift Current, SK	358	3.5	676	BC	L	10	crested w-grass vs. f-w-w	15	6	29.2	1.8	18	**Curtin et al. 2000a**
Swift Current, SK	358	3.5	676	BC	L	10	crested w-grass vs. f-w-w	15	6	33.7	-2.7	-27	Curtin et al. 2000a
Swift Current, SK	358	3.5	676	BC	L	10	crested w-grass vs. f-w-w	15	6	33.1	-2.1	-21	Curtin et al. 2000
Swift Current, SK	358	3.5	678	BC	SL	8	crested w-grass	15	6	32.0	-1.0	-13	Curtin et al. 2000a
Swift Current, SK	358	3.5	678	BC	SL	8	gm in rotation	15	6	30.6	0.5	6	**Curtin et al. 2000b**
Indian Head, SK	427	2.5	681	BlC	HC	4	NT variable rotation	15	4	46.8	3.7	93	**Grant and Lafond 1994**
Indian Head, SK	427	2.5	681	BlC	HC	4	NT variable rotation	15	4	46.8	3.9	98	Grant and Lafond 1994
Melfort, SK	411	0.3	588	BlC	SiCL	25	NT f-w	15	12	77.2	12.0	48	**McConkey et al. 2003**
Elstow, SK	355	1	625	BlC	CL	16	NT variable rotation	15	12	52.2	4.4	28	McConkey et al. 2003
Indian Head, SK	427	2	577	BlC	C	8	NT variable rotation	15	12	39.5	4.1	51	McConkey et al. 2003
Canwood, SK	456	0.3	624	DGC	L	12	inorganic fertilizer	30	80	89.2	3.9	32.3	**Nyborg et al. 1999**
Canwood, SK	456	0.3	620	BlC	SL-SCL	12	inorganic fertilizer	37.5	28	114.0	-10.0	-83.3	**Nyborg et al. 1998**
Canwood, SK	456	0.3	620	BlC	SL-SCL	12	inorganic fertilizer	37.5	28	114.0	0.0	0.0	Nyborg et al. 1998

Canwood, SK	456	0.3	620	BlC	SL-SCL	12	inorganic fertilizer	37.5	28	114.0	6.0	50.0	Nyborg et al. 1998
Canwood, SK	456	0.3	620	BlC	SL-SCL	12	inorganic fertilizer	37.5	28	114.0	-11.0	-91.7	Nyborg et al. 1998
Melfort, SK	506	0.8	557	BC	SiCL	3	inorganic fertilizer	15	40	N/A	N/A	N/A	**Pare et al. 1999[y]**
Melfort, SK	506	0.8	557	BC	SiCL	3	organic fertilizer	15	40	N/A	N/A	N/A	Pare et al. 1999
Melfort, SK	506	0.8	557	BC	SiCL	3	organic fertilizer	15	40	N/A	N/A	N/A	Pare et al. 1999
Ottawa, ON	846	5.9	633	MB	SL	5	NT cont. c	60	16	74.8	6.0	120	**Angers et al. 1997**
Ottawa, ON	846	5.9	633	MB	SL	5	NT cont. w	60	16	65.9	14.8	297	Angers et al. 1997
Delhi, ON	935	7.8	720	GBL	SL	4	NT cont. c	60	16	30.0	-3.1	-77	Angers et al. 1997
Harrow, ON	819	8.7	673	LG	CL	11	NT cont. c	60	16	82.7	-0.9	-8	Angers et al. 1997
Woodlsee, ON	875	8.7	720	HG	CL	32	inorganic fertilizer	42	4	81.3	8.0	25	**Gregorich et al. 1996**
Woodlsee, ON	875	8.7	720	HG	CL	35	legumes in rotation vs. cont. c	70	3	115.5	14.1	40	**Gregorich et al. 2001**
Woodlsee, ON	875	8.7	720	HG	CL	35	legumes in rotation vs. cont. c	70	3	109.2	24.6	70	Gregorich et al. 2001
Thorndale, ON	800	7.9	686	GBL	SiL	15	NT c-w-s	45	1	75.1	-2.1	-13.7	**VandenBygaart et al. 2002**
Thorndale, ON	800	7.9	686	GBL	SiL	15	NT c-w-s	45	1	76.0	-12.7	-85.0	VandenBygaart et al. 2002
Thorndale, ON	800	7.9	686	GBL	SiL	15	NT c-w-s	45	1	48.8	11.6	77.4	VandenBygaart et al. 2002
Thorndale, ON	800	7.9	686	GBL	SiL	15	NT c-w-s	45	1	84.1	-2.0	-13.4	VandenBygaart et al. 2002
Thorndale, ON	800	7.9	686	GBL	SiL	15	NT c-w-s	45	1	62.7	-3.8	-25.5	VandenBygaart et al. 2002
Thorndale, ON	800	7.9	686	GBL	SiL	15	NT c-w-s	45	1	39.8	22.0	146.5	VandenBygaart et al. 2002
Thorndale, ON	800	7.9	686	GBL	SiL	15	NT c-w-s	45	1	79.1	-38.2	-254.9	VandenBygaart et al. 2002
Thorndale, ON	800	7.9	686	GBL	SiL	15	NT c-w-s	45	1	88.2	-20.5	-136.4	VandenBygaart et al. 2002
Thorndale, ON	800	7.9	686	GBL	SiL	15	NT c-w-s	45	1	47.4	1.9	13.0	VandenBygaart et al. 2002
Paris, ON	855	7.9	657	GBL	SL	15	NT c-w-s	45	1	41.1	-1.3	-8.6	VandenBygaart et al. 2002
Paris, ON	855	7.9	657	GBL	SL	15	NT c-w-s	45	1	46.7	-12.3	-82.1	VandenBygaart et al. 2002
Paris, ON	855	7.9	657	GBL	SL	15	NT c-w-s	45	1	37.7	-1.5	-10.0	VandenBygaart et al. 2002
Paris, ON	855	7.9	657	GBL	SL	15	NT c-w-s	45	1	36.0	-0.9	-5.8	VandenBygaart et al. 2002
Paris, ON	855	7.9	657	GBL	SL	15	NT c-w-s	45	1	20.5	4.0	26.6	VandenBygaart et al. 2002
Paris, ON	855	7.9	657	GBL	SL	15	NT c-w-s	45	1	42.4	0.9	5.9	VandenBygaart et al. 2002
Paris, ON	855	7.9	657	GBL	SL	15	NT c-w-s	45	1	33.1	-1.9	-12.6	VandenBygaart et al. 2002
Paris, ON	855	7.9	657	GBL	SL	15	NT c-w-s	45	1	30.0	0.2	1.5	VandenBygaart et al. 2002
Paris, ON	855	7.9	657	GBL	SL	15	NT c-w-s	45	1	36.4	-2.2	-14.7	VandenBygaart et al. 2002
Paris, ON	855	7.9	657	GBL	SL	15	NT c-w-s	45	1	21.1	12.5	83.3	VandenBygaart et al. 2002
Paris, ON	855	7.9	657	GBL	SL	15	NT c-w-s	45	1	49.5	-9.5	-63.4	VandenBygaart et al. 2002
Paris, ON	855	7.9	657	GBL	SL	15	NT c-w-s	45	1	31.3	7.5	50.2	VandenBygaart et al. 2002
Paris, ON	855	7.9	657	GBL	SL	15	NT c-w-s	45	1	24.8	3.3	21.8	VandenBygaart et al. 2002
Paris, ON	855	7.9	657	GBL	SL	15	NT c-w-s	45	1	33.3	-0.8	-5.5	VandenBygaart et al. 2002
Paris, ON	855	7.9	657	GBL	SL	15	NT c-w-s	45	1	45.9	-2.5	-16.9	VandenBygaart et al. 2002
Dresden, ON	817	8.3	725	GBL	CL	15	NT c-w-s	45	1	56.0	-6.1	-41.0	VandenBygaart et al. 2002
Dresden, ON	817	8.3	725	GBL	CL	15	NT c-w-s	45	1	53.3	-2.0	-13.4	VandenBygaart et al. 2002
Dresden, ON	817	8.3	725	GBL	CL	15	NT c-w-s	45	1	40.8	5.1	34.0	VandenBygaart et al. 2002
Dresden, ON	817	8.3	725	GBL	CL	15	NT c-w-s	45	1	36.3	8.3	55.2	VandenBygaart et al. 2002
Strathroy, ON	958	7.9	681	GBL	SL	15	NT c-w-s	45	1	61.6	-20.2	-134.4	VandenBygaart et al. 2002
Strathroy, ON	958	7.9	681	GBL	SL	15	NT c-w-s	45	1	47.7	-0.4	-2.7	VandenBygaart et al. 2002
Strathroy, ON	958	7.9	681	GBL	SL	15	NT c-w-s	45	1	43.8	-4.6	-30.5	VandenBygaart et al. 2002
Strathroy, ON	958	7.9	681	GBL	SL	15	NT c-w-s	45	1	47.0	-9.1	-60.6	VandenBygaart et al. 2002
Strathroy, ON	958	7.9	681	GBL	SL	15	NT c-w-s	45	1	38.9	-10.1	-67.5	VandenBygaart et al. 2002
Strathroy, ON	958	7.9	681	GBL	SL	15	NT c-w-s	45	1	46.6	-14.3	-95.3	VandenBygaart et al. 2002
Strathroy, ON	958	7.9	681	GBL	SL	15	NT c-w-s	45	1	41.1	3.0	19.7	VandenBygaart et al. 2002
Strathroy, ON	958	7.9	681	GBL	SL	15	NT c-w-s	45	1	44.1	-3.9	-26.2	VandenBygaart et al. 2002
Strathroy, ON	958	7.9	681	GBL	SL	15	NT c-w-s	45	1	44.2	-10.9	-72.9	VandenBygaart et al. 2002
Delhi, ON	935	7.8	710	GBL	LS	6	NT cont. c	50	20	23.4	-1.3	-21.0	**Wanniarachchi et al. 1999**
Elora, ON	939	6.3	610	MB	SiL	29	NT cont. c	50	20	72.2	-0.5	-1.7	Wanniarachchi et al. 1999
Elora, ON	939	6.3	637	MB	SiL	19	NT cont. c	15	4	21.9	0.2	0.8	**Winter et al. 1990**
Elora, ON	939	6.3	628	MB	SiL	20	NT c-w-s	40	20	81.9	6.8	34.0	**Yang and Kay 2001a**
Elora, ON	939	6.3	628	MB	SiL	20	legumes in rotation vs. cont. c	40	20	81.2	4.3	21.8	Yang and Kay 2001a
Clinton, ON	943	7.3	642	GBL	SL	19	NT c-w-s	30	4	105.1	70.1	369.2	**Yang and Kay 2001b**
Clinton, ON	943	7.3	642	GBL	LS	19	NT c-w-s	30	6	112.9	14.7	77.4	Yang and Kay, 2001b
Clinton, ON	943	7.3	642	GBL	CL	19	NT c-w-s	30	8	61.9	-4.7	-24.7	Yang and Kay, 2001b

St-Lambert, QC	1200	4	653	OG	SiL	11	NT cont. c	24	12	91.3	2.7	25	**Angers et al. 1993**
St-Lambert, QC	1200	4	653	OG	SiL	11	NT cont. c	24	12	65.9	17.3	157	**Angers et al. 1995**
St-Lambert, QC	1200	4	653	OG	SiL	11	NT cont. c	24	12	64.9	3.8	35	Angers et al. 1995
La Pocatiere, QC	967	4.2	552	HG	C	6	NT cont. barley	60	16	91.0	-20.3	-338	**Angers et al. 1997**
Normandin, QC	866	0.9	584	HG	CL	4	NT cont. barley	60	16	71.7	-6.5	-162	Angers et al. 1997
Normandin, QC	866	0.9	584	HG	SiC	3	NT cont. barley	60	16	111.9	-5.5	-182	Angers et al. 1997
Normandin, QC	866	0.9	584	HG	SiC	3	NT cont. barley	60	16	111.9	2.7	90	Angers et al. 1997
Ste-Anne-de-Bellevue, QC			557	DB	SCL	6	inorganic fertilizer	20	N/A	40.7	2.4	40	**Liang and Mackenzie 1992**
Fourchette, QC				HG	SL	9	organic fertilizer	15	N/A	N/A	N/A	N/A	**N'dayegamire and Angers 1993**[y]
Fourchette, QC				HG	SL	9	organic fertilizer	15	N/A	N/A	N/A	N/A	N'dayegamire and Angers 1993
Fourchette, QC				HG	SL	9	organic fertilizer	15	N/A	N/A	N/A	N/A	N'dayegamire and Angers 1993
Fourchette, QC				HG	SL	9	inorganic fertilizer	15	N/A	N/A	N/A	N/A	N'dayegamire and Angers 1993
Harrington, PEI	1077	5.9	487	HFP	FSL	8	NT w-barley-s	60	16	92.9	-8.0	-99	**Angers et al. 1997**
Charlottetown, PEI	1077	5.9	487	GBL	L	8	NT w-barley-s	60	16	44.8	-0.7	-9	Angers et al. 1997
Charlottetown, PEI	1077	5.9	487	HFP	SL	3	NT cont. potato	30	20	70.7	-4.2	-141	**Carter and Kunelius 1986**
Harrington, P.E.I.	1200	5.2	487	HFP	FSL	5	NT barley-potato	8	18	16.6	0.5	9	**Carter and Sanderson 2001**
Harrington, P.E.I.	1200	5.2	487	HFP	FSL	5	NT barley-forage-potato	8	18	16.7	1.7	34	Carter and Sanderson 2001
Charlottetown, PEI	1077	5.9	487	HFP	N/A	6	NT cont. c	16	4	15.2	1.9	32	**Carter et al. 2002**
PEI	1077	5.9	487	GL	L	8	NT variable	40	20	47.4	-5.9	-74	**Carter 1996**

[z] OG = Orthic Gleysol, GBL = Gray-Brown Luvisol, HFP = Humo-Ferric Podzol, MB = Melanic Brunisol, HG = Humic Gleysol, BC = Brown Chernozem, DBC = Dark Brown Chernozem, BlC = Black Chern
DGC = Dark Gray Chernozem, GL = Gray Luvisol, OG = Orthic Gleysol, LG = Luvic Gleysol.

[y] SOC in concentration only

[x] NT relative to CT, c = corn, cont. c = continuous corn, can. = canola, w = wheat, b = barley, h = hay, cont. w = continuous wheat, f-w = fallow-wheat rotation, f-w-w = fallow-wheat-wheat ro
gm = green manure, c-w-s = corn-wheat-soybean in rotation; treatments "in rotation", organic fertilizer, inorganic fertilizer and straw are relative to their absence.

[w] N/A - not available in publication or not applicabl

[v] canola assumed to have similar carbon inputs relative to wheat (Con Campbell, personal communication, Agriculture and Agri-food Canada, Ottawa,

[u] samples taken in Ap horizon and Ap thickness and bulk density from one sample period used in calculation of SOC on an area b