

**Appendix S3. Summary of reports of ploidy determination in wild species of *Solanum* sect. *Petota*.**

Species <sup>a</sup>	2n chromosome number	Data sources <sup>b</sup>
<i>Solanum acaule</i> Bitter	604	1 <sup>c</sup> <b>48:</b> Rybin, 1929, 1933; Bukasov, 1933, 1938a; Juzeyczuk, 1937; Propach, 1937a,b; Lamm, 1943, 1945; Hawkes, 1944; Koopmans, 1951; Okuno, 1951; Brücher, 1954, 1959; Swaminathan, 1954; Gilles, 1955; Lhoas, 1956; Wangenheim, 1957; Lebedeva, 1960b; Diers, 1961; Hermans and DeBoer, 1971; Ochoa, 1978, 1980a, 1990, 1999, 2003; Okada and Clausen, 1982, 1985; Masuelli and Camadro, 1992; Bamberg <i>et al.</i> , 1996; Salas <i>et al.</i> , 2001; 45 new reports
<i>S. achacachense</i> Cárdenas	2	Ochoa, 1985; Bamberg <i>et al.</i> , 1996
<i>S. acroglossum</i> Juz.	9	Bamberg <i>et al.</i> , 1996; Ochoa, 1999, 2003
<i>S. acroscopicum</i> Ochoa	20	Ochoa, 1978, 1999, 2003; Bamberg <i>et al.</i> , 1996; Salas <i>et al.</i> , 2001
<i>S. agrimonifolium</i> Rydb.	29	Marks, 1965; Watanabe and Orrillo, 1994; Bamberg <i>et al.</i> , 1996; Castillo and Spooner, 1997; Spooner <i>et al.</i> , 2001; 8 new reports;
<i>S. alandiae</i> Cárdenas	14	Ochoa, 1980a; Bamberg <i>et al.</i> , 1996; 4 new reports
<i>S. albicans</i> (Ochoa) Ochoa	62	Ochoa, 1978, 1982a, 1993, 1999, 2003; Bamberg <i>et al.</i> , 1996; Salas <i>et al.</i> , 2001; 10 new reports
<i>S. albornozii</i> Correll	5	Bamberg <i>et al.</i> , 1996; Ochoa, 1982a, 1993
<i>S. amayanum</i> Ochoa	5	Ochoa, 1992a, 2003; Salas <i>et al.</i> , 2001
<i>S. ambosinum</i> Ochoa	29	Bamberg <i>et al.</i> , 1996; Ochoa, 1999, 2003; 2 new reports
<i>S. anamatophilum</i> Ochoa	2	Ochoa, 1992a; Salas <i>et al.</i> , 2001
<i>S. ancophilum</i> (Correll) Ochoa	6	Ochoa, 1999; Salas <i>et al.</i> , 2001
<i>S. ancoripae</i> Ochoa	2	Ochoa, 1999, 2003
<i>S. andeanum</i> Baker	18	1 <sup>d</sup> <b>24:</b> Swaminathan and Howard, 1953; Ochoa, 1982a, 1993; Bamberg <i>et al.</i> , 1996; Castillo and Spooner, 1997; 9

		new reports
<b>48:</b> Ochoa, 1982a		
<i>S. ×arahuayum</i> Ochoa	3	Ochoa, 1994, 2003
<i>S. aridophilum</i> Ochoa	4	Ochoa, 1972b, 1999, 2003
<i>S. arnezii</i> Cárdenas	3	Bamberg <i>et al.</i> , 1996; 1 new report
<i>S. augustii</i> Ochoa	4	Ochoa, 1974, 1999, 2003; Salas <i>et al.</i> , 2001
<i>S. avilesii</i> Hawkes and Hjert.	6	Ochoa 1985; Ochoa, 1990; Bamberg <i>et al.</i> , 1996; 1 new report
<i>S. ayacuchense</i> Ochoa	1	Ochoa, 1982c
<i>S. aymarae</i> Ochoa	3	Ochoa, 1987c, 1999; Salas <i>et al.</i> , 2001
<i>S. berthaultii</i> Hawkes	67	Hawkes, 1944; Brücher and Ross, 1953; Gottschalk and Peters, 1955; Lebedeva, 1960b; Haynes, 1963; Vogt and Rowe, 1968; Ochoa, 1980a, 1990; Bamberg <i>et al.</i> , 1996; 8 new reports
<i>S. bill-hookeri</i> Ochoa	2	Ochoa, 1988a; Salas <i>et al.</i> , 2001
<i>S. ×blanco-galdosii</i> Ochoa	6	Ochoa, 1973; Bamberg <i>et al.</i> , 1996; Salas <i>et al.</i> , 2001
<i>S. boliviense</i> Dunal	28	Hawkes, 1944, 1956a; Ochoa, 1980a, 1990; Bamberg <i>et al.</i> , 1996; 7 new reports
<i>S. bombycinum</i> Ochoa	1	Ochoa, 1983c
<i>S. brevicaule</i> Bitter	21	<b>24:</b> Ochoa, 1990; Bamberg <i>et al.</i> , 1996; 4 new reports
<i>S. ×bruecheri</i> Correll	1	<b>48:</b> 6 new reports
<i>S. buesii</i> Vargas	10	Brücher, 1970
<i>S. bukasovii</i> Juz.	421	Ochoa, 1992a, 1999, 2003; Bamberg <i>et al.</i> , 1996; Salas <i>et al.</i> , 2001; Rybin, 1929, 1933; Bukasov, 1933; Juzepczuk, 1937; Hawkes, 1944; Okuno, 1951; Gilles, 1955; Haynes, 1964; Vogt and Rowe, 1968; Ochoa, 1978, 1981f, 1983a, 1999, 2003; Bamberg <i>et al.</i> , 1996; Salas <i>et al.</i> , 2001; 41 new reports
<i>S. bulbocastanum</i> Dunal	61	<b>24:</b> Bukasov, 1933; Sidorov, 1937; Bukasov, 1938a; Hawkes, 1956a; Magoon <i>et al.</i> , 1958; Lebedeva, 1960a; Hermans and DeBoer, 1971; Matsubayashi and Misoo, 1977; Bamberg <i>et al.</i> , 1996; 13 new reports
<i>S. burkartii</i> Ochoa	1	<b>36:</b> Swaminathan and Howard, 1953; Hawkes, 1956a Ochoa, 1999

<i>S. burtonii</i> Ochoa	1	Ochoa, 1993
<i>S. cajamarquense</i> Ochoa	8	Ochoa, 1999, 2003; 1 new report
<i>S. calacalinum</i> Ochoa	2	Ochoa, 1982a, 1993
<i>S. calycescens</i> <sup>f</sup> Bitter	1	Hawkes and Hjerting, 1969
<i>S. candolleanum</i> P.	23	<b>24:</b> Ochoa, 1958, 1980a, 1990, 1999; Bamberg <i>et al.</i> , 1996; 1 new report
Berthault.		
<i>S. cantense</i> Ochoa	19	<b>36:</b> Ochoa, 1990, 2003
<i>S. cardiophyllum</i> Lindl.	12	Ochoa, 1978, 1999, 2003; Salas <i>et al.</i> , 2001
	8	<b>24:</b> Choudhuri, 1943; Hawkes, 1956a; Magoon <i>et al.</i> , 1958; Lebedeva, 1960a; Bamberg <i>et al.</i> , 1996; 5 new reports
<i>S. chacoense</i> Bitter	217	<b>36:</b> Rybin, 1929, 1933; Longley and Clark, 1930; Bukasov, 1933; Sidorov, 1937; Hawkes, 1944 De Vilmorin and Simonet, 1927, 1928; Smith, 1927; Clark, 1929; Rybin, 1929; Longley and Clark, 1930; Bukasov, 1933, 1937a, 1938a, 1938b, 1940b; Oppenheimer, 1933; Juzepczuk, 1937; Propach, 1937a; Shepeleva, 1937; Sidorov, 1937; Ratera, 1938, 1940, 1944; Choudhuri, 1943, 1944; Koopmans, 1951; Okuno, 1951; Brücher, 1954; Gottschalk, 1954; Gilles, 1955; Gottschalk and Peters, 1955; Lhoas, 1956; Magooon <i>et al.</i> , 1958; Walker, 1959; Lebedeva, 1960b, 1962; Matsubayashi, 1962b; Marks, 1966; Hernsen, 1969; Lee and Erickson, 1979; Ochoa, 1980a; Moscone, 1992; Spooner <i>et al.</i> , 1994; Bamberg <i>et al.</i> , 1996
	7	Ochoa, 1978, 1999; Bamberg <i>et al.</i> , 1996; 20 new reports
<i>S. chilensisense</i> Ochoa	3	Ochoa, 1981h, 1993; Bamberg <i>et al.</i> , 1996
<i>S. chillonanum</i> Ochoa	4	Ochoa, 1987a, 1992a, 1999; Salas <i>et al.</i> , 2001
<i>S. chiquidense</i> Ochoa	48	Ochoa, 1978, 1999, 2003; Salas <i>et al.</i> , 2001; 1 new report
<i>S. chomatophilum</i> Bitter	78	Marks, 1965; Ochoa, 1978, 1982a, 1993, 1999, 2003; Bamberg <i>et al.</i> , 1996; Salas <i>et al.</i> , 2001; 2 new reports
<i>S. circaeifolium</i> Bitter	18	Cárdenas and Hawkes, 1946; Gottschalk and Peters, 1955; Ochoa, 1980a, 1990; Bamberg <i>et al.</i> , 1996; 4 new reports
<i>S. clarum</i> Correll	6	Marks, 1968, 1969; Bamberg <i>et al.</i> , 1996; 1 new report
<i>S. colestipetalum</i> Vargas	23	Bamberg <i>et al.</i> , 1996; Ochoa, 1999; 2 new reports
<i>S. colombianum</i> Bitter	80	Rybin, 1929; Bukasov, 1933, 1938a; Sidorov, 1937; Marks, 1965; Ochoa, 1982a, 1993; Watanabe and Orrillo, 1994; Bamberg <i>et al.</i> , 1996; Castillo and Spooner, 1997; 10 new reports

<i>S. commersonii</i> Dunal	84	14	<b>24:</b> Bulkasov and Lechnovich, 1935; Shepeleva, 1937; Sidorov, 1937; Bulkasov, 1938a,b, 1940a,b; Ratera, 1938; Kameraz, 1940; Koopmans, 1951; Okuno, 1951; Gilles, 1955; Lhoas, 1956; Brücher, 1976; Masuelli and Camadro, 1992; Bamberg <i>et al.</i> , 1996; 21 new reports
<b>36:</b> De Vilmorin, 1929; Rybin, 1929, 1933; Longley and Clark, 1930; Bulkasov, 1933, 1938a; Propach, 1937a; Sidorov, 1937; Ivanovskaya, 1939; Hawkes, 1944; Okuno, 1951; Gilles, 1955			
<i>S. contumazaense</i> Ochoa		2	Ochoa, 1999
<i>S. demissum</i> Lindl.			8 <sup>g</sup> 1966 <b>60:</b> Bulkasov, 1933; Rybin, 1933; Juzepczuk, 1937; Hawkes, 1944; Okuno, 1951
			<b>72:</b> De Vilmorin and Simonet, 1928; Jørgensen, 1928; Longley and Clark, 1930; Sidorov, 1937; Hawkes, 1944, 1956b; Koopmans, 1951; Gilles, 1955, 1960; Marks, 1955, 1965; Lhoas, 1956; Lebedeva, 1960b; Marks <i>et al.</i> , 1965; Bamberg <i>et al.</i> , 1996; 30 new reports
			Ochoa, 1985, 1990; Spooner <i>et al.</i> , 1994; Bamberg <i>et al.</i> , 1996; 1 new report
			Ochoa, 1972a, 1981b, 1999; Bamberg <i>et al.</i> , 1996; Salas <i>et al.</i> , 2001
			No reports
<i>S. ×doddii</i> Correll		12	Salaman, 1926; Rybin, 1929, 1933; Hawkes, 1944; 3 new reports
<i>S. dolichocremastrum</i> Bitter		15	Bamberg <i>et al.</i> , 1996; 9 new reports
<i>S. donachui</i> (Ochoa) Ochoa			Ochoa, 1981b, 1982a; Bamberg <i>et al.</i> , 1996; Castillo and Spooner, 1997; 3 new reports
<i>S. ×edinense</i> P. Berthault.			Ochoa, 1980a, 1990; Bamberg <i>et al.</i> , 1996; Castillo and Spooner, 1997; 2 new reports
<i>S. ehrenbergii</i> (Bitter) Rydb.		27	Ochoa, 1990
<i>S. flahaultii</i> Bitter		17	Castillo and Spooner, 1997
<i>S. flavoviridens</i> Ochoa		1	Hawkes, 1956a; Ochoa, 1999, 2003; Salas <i>et al.</i> , 2001
<i>S. gandarillasii</i> Cárdenas		8	2 Hawkes, 1954; Marks, 1965
<i>S. garcia-harrigae</i> Ochoa			Ochoa, 1992a, 2003
<i>S. gracilifrons</i> Bitter		5	
<i>S. guerreroense</i> Correll			
<i>S. guzmanguense</i> Whalen and Sagást.		5	Ochoa, 1999, 2003; Salas <i>et al.</i> , 2001
<i>S. hastiforme</i> Correll		5	1 new report
<i>S. hintonii</i> Correll		1	Sangowawa, 1989; Bamberg <i>et al.</i> , 1996, 3 new reports
<i>S. hjerthingii</i> Hawkes			Hawkes and Okada, 1988; Bamberg <i>et al.</i> , 1996; Spooner <i>et al.</i> , 1994; 3 new reports
<i>S. hopesii</i> Hawkes and K.		7	

A. Okada	<i>S. hougasii</i> Correll	14	Hawkes, 1954; Swaminathan and Hougas, 1954; Watanabe and Orrillo, 1994; Bamberg <i>et al.</i> , 1996; 6 new reports
	<i>S. huancabambense</i> Ochoa	8	Bamberg <i>et al.</i> , 1996; Ochoa, 1999
	<i>S. huancavelicae</i> Ochoa	3	Salas <i>et al.</i> , 2001; Ochoa, 2003
	<i>S. huarochiriaense</i> Ochoa,	23	Ochoa, 1978, 1999, 2003; Salas <i>et al.</i> , 2001
	<i>S. humectophilum</i> Ochoa	6	Ochoa, 1992a, 1999, 2003
	<i>S. hypocrateanthrum</i> Bitter	26	Ochoa, 1978, 1999, 2003; Bamberg <i>et al.</i> , 1996; Salas <i>et al.</i> , 2001
	<i>S. immitis</i> Dunal	10 1	24: Ochoa, 1978, 1999; Bamberg <i>et al.</i> , 1996; Salas <i>et al.</i> , 2001; 1 new report  36: Ochoa, 1978
	<i>S. incahuasiinum</i> Ochoa	2	Ochoa, 1979a, 1999
	<i>S. incamayoense</i> K. A.	8	Bamberg <i>et al.</i> , 1996
	Okada and A. M. Clausen		
	<i>S. incasicum</i> Ochoa	2	Ochoa, 1981c, 2003
	<i>S. ×indunii</i> K. A. Okada and	25	Okada and Clausen, 1982
	A. M. Clausen <sup>h</sup>		
	<i>S. infundibuliforme</i> Phil.	142	Choudhuri, 1943, 1944; Hawkes, 1944; Gottschalk, 1954; Brücher, 1957a; Ochoa, 1980a,b, 1990; Okada and Clausen, 1985; Masuelli and Camadro, 1992; Bamberg <i>et al.</i> , 1996; 17 new reports
	<i>S. ingifolium</i> Ochoa	5	Ochoa, 1978, 1999
	<i>S. iopetalum</i> (Bitter)		58 Rybin, 1929; Hawkes, 1954; Marks, 1955, 1965; Watanabe and Orrillo, 1994; Bamberg <i>et al.</i> , 1996; 37 new reports
	Hawkes		
	<i>S. irosimum</i> Ochoa	9	Ochoa, 1981d, 1999; Bamberg <i>et al.</i> , 1996
	<i>S. jaenense</i> Ochoa		3 Ochoa, 1999, 2003
	<i>S. jalcae</i> Ochoa	21	Ochoa, 1978, 1999, 2003; Bamberg <i>et al.</i> , 1996; Salas <i>et al.</i> , 2001
	<i>S. jamesii</i> Torr.	82	De Vilmorin and Simonet, 1927, 1928; Smith, 1927; Rybin, 1929; Longley and Clark, 1930; Bukasov, 1933; Magoon <i>et al.</i> , 1958; Matsubayashi and Misoo, 1977; Bamberg <i>et al.</i> , 1996; 54 new reports
	<i>S. kurtzianum</i> Bitter and	106	Bukasov, 1940b; Gilles, 1955; Gottschalk and Peters, 1955; Hawkes, 1956a; Lebedeva, 1960b; Brücher, 1967,

Wittm.							
<i>S. laxissimum</i> Bitter	22						
<i>S. leptophyes</i> Bitter <sup>†</sup>	118	107					
<i>S. lesteri</i> Hawkes and Hjert.	3						
<i>S. lignicaule</i> Vargas	16						
<i>S. limbaniense</i> Ochoa	14						
<i>S. ×litusinum</i> Ochoa	1						
<i>S. lobbianum</i> Bitter			5				
<i>S. longiconicum</i> Bitter			18				
<i>S. longiusculus</i> Ochoa	2						
<i>S. lopez-camarenae</i> Ochoa	4						
<i>S. maglia</i> Schldl.	2	7					
<i>S. marinense</i> Vargas	31						
<i>S. medians</i> Bitter <sup>†</sup>	49	42					
<i>S. megalostrocholum</i> Bitter		207					
<i>S. ×michoacanum</i> (Bitter)		1					
Rydb.							
<i>S. microdontum</i> Bitter	125	24					
<b>24:</b> Hawkes, 1956a; Clausen and Okada, 1987; Masuelli and Camadro, 1992; Bamberg <i>et al.</i> , 1996; Ochoa, 1999;							
9 new reports							
<b>48:</b> Clausen and Okada, 1987; Bamberg <i>et al.</i> , 1996; 5 new reports							
Bamberg <i>et al.</i> , 1996; 2 new reports							
Ochoa, 1972a, 1978, 1999, 2003; Bamberg <i>et al.</i> , 1996; Salas <i>et al.</i> , 2001							
Ochoa, 1974, 1999, 2003; Bamberg <i>et al.</i> , 1996; Salas <i>et al.</i> , 2001							
Ochoa, 1981c							
Ochoa, 1982a, 1992c; Castillo and Spooner, 1997							
Swaminathan and Howard, 1953; Gilles, 1955; Bamberg <i>et al.</i> , 1996; Spooner <i>et al.</i> , 2001; 5 new reports							
Ochoa, 1987b, 2003							
Ochoa, 1978, 1999							
<b>24:</b> Hawkes and Hjerting, 1969; Spooner and Clausen, 1993							
<b>36:</b> Rybin, 1929, 1933; Bulkasov, 1933, 1938a; Hawkes, 1944; Okuno, 1951							
Hawkes, 1956a; Ochoa, 1978, 1999; Bamberg <i>et al.</i> , 1996; Salas <i>et al.</i> , 2001; 1 new report							
<b>24:</b> Diers, 1961; Bamberg <i>et al.</i> , 1996; Ochoa, 1999; Salas <i>et al.</i> , 2001							
<b>36:</b> Rybin, 1929, 1933; Ochoa, 1978, 1999, 2003; Salas <i>et al.</i> , 2001							
<b>24:</b> Hawkes, 1956a; Okada and Clausen, 1982; Ochoa, 1990, 1999, 2003; Bamberg <i>et al.</i> , 1996; Salas <i>et al.</i> , 2001; 29 new reports							
Hawkes, 1990							

<i>S. minutifolium</i> Correll	3	Ochoa, 1982a, 1993; Bamberg <i>et al.</i> , 1996
<i>S. mochiquense</i> Ochoa	11	Ochoa, 1972a, 1999; Bamberg <i>et al.</i> , 1996
<i>S. morelliforme</i> Bitter and G. Muench	12	Swaminathan and Howard, 1953; Bamberg <i>et al.</i> , 1996; 6 new reports
<i>S. moscopanum</i> Hawkes		27 Hawkes, 1954; Bamberg <i>et al.</i> , 1996; Castillo and Spooner, 1997; 2 new reports
<i>S. multiinterruptum</i> Bitter	81	24: Ochoa, 1972a, 1978, 1982b, 1999, 2003; Bamberg <i>et al.</i> , 1996; Salas <i>et al.</i> , 2001.
<i>S. nemorosum</i> Ochoa	1	36: Ochoa, 1999
<i>S. neocardensii</i> Hawkes and Hjert.	3	1 Ochoa, 1983b
<i>S. neorossii</i> Hawkes and Hjert.	5	Ochoa, 1985; Bamberg <i>et al.</i> , 1996
<i>S. neovalenzuelae</i> L. López	1	Bamberg <i>et al.</i> , 1996
<i>S. neovargasii</i> Ochoa		Castillo and Spooner, 1997
<i>S. neovariolii</i> Ochoa	4	1 Ochoa, 2003
<i>S. ×neowebberbaueri</i> Wittm.	11	Ochoa, 1983d, 1985, 1990
<i>S. nubicola</i> Ochoa	9	Ochoa, 1999; Salas <i>et al.</i> , 2001
<i>S. okadae</i> Hawkes and Hjert.	20	Ochoa, 1992a, 1999, 2003
<i>S. olmosense</i> Ochoa	3	Ochoa, 1984b, 1990; Bamberg <i>et al.</i> , 1996; 3 new reports
<i>S. oplocense</i> Hawkes	20	Ochoa, 1982a, 1993, 1999
	16	49 24: Hawkes, 1956a; Ochoa, 1990; Bamberg <i>et al.</i> , 1996; 3 new reports
		48: Ochoa, 1990; Bamberg <i>et al.</i> , 1996; 1 new report
		72: Ochoa, 1980a, 1990; Bamberg <i>et al.</i> , 1996; 6 new reports
<i>S. orocense</i> Ochoa	3	Castillo and Spooner, 1997
<i>S. orophilum</i> Correll	19	Ochoa, 1978, 1999; Salas <i>et al.</i> , 2001; 1 new report
<i>S. ortegae</i> Ochoa	1	Ochoa, 1998
<i>S. otites</i> Dunal	2	Castillo and Spooner, 1997

<i>S. oxycarpum</i> Schiede	19	Marks, 1965; Watanabe and Orrillo, 1994; Bamberg <i>et al.</i> , 1996; Spooner <i>et al.</i> , 2001; 5 new reports
<i>S. pampassense</i> Hawkes	7	Hawkes, 1944; Ochoa, 1978; Bamberg <i>et al.</i> , 1996
<i>S. pamplonense</i> L. López	1	Castillo and Spooner, 1997
<i>S. paucijugum</i> Bitter	13	Ochoa, 1993; Watanabe and Orrillo, 1994; Castillo and Spooner, 1997
<i>S. paucissectum</i> Ochoa	15	Bamberg <i>et al.</i> , 1996; Ochoa, 1999, 2003
<i>S. peloquinianum</i> Ochoa	7	Ochoa, 1999, 2003; Salas <i>et al.</i> , 2001
<i>S. pillahuatense</i> Vargas	2	Ochoa, 1999; Salas <i>et al.</i> , 2001
<i>S. pinnatisectum</i> Dunal	19	Gilles, 1955; Magoon <i>et al.</i> , 1958; Lebedeva, 1960b; Bamberg <i>et al.</i> , 1996; 2 new reports
<i>S. piurae</i> Bitter	17	Ochoa, 1992a, 1999, 2003; Bamberg <i>et al.</i> , 1996;
<i>S. polyadenium</i> Greene <sup>k</sup>	27	<b>24:</b> Longley and Clark, 1930; Bulkasov, 1938a; Choudhuri, 1943; Gilles, 1955; Gottschalk and Peters, 1955; Lhoas, 1956; Lebedeva, 1958, 1960b; Bamberg <i>et al.</i> , 1996; 3 new reports
		<b>48:</b> Gilles, 1955
<i>S. puchupuchense</i> Ochoa	2	Ochoa, 1999
<i>S. raphanifolium</i> Cárdenas and Hawkes	125	Hawkes, 1956a; Bamberg <i>et al.</i> , 1996; Ochoa, 1999, 2003; Salas <i>et al.</i> , 2001; 3 new reports
<i>S. raquialatum</i> Ochoa	7	Ochoa, 1992a, 1999
<i>S. ×rechei</i> Hawkes and Hjert.	4	<b>1<sup>l</sup></b> <b>24:</b> Clausen and Spooner, 1998 <b>36:</b> Clausen and Spooner, 1998
<i>S. regularifolium</i> Corell	3	Ochoa, 1981g, 1993
<i>S. rhomboideilanceolatum</i>	5	Ochoa, 1999, 2003
		Ochoa
<i>S. ×ruiz-lealii</i> Brücher	1	Brücher, 1970
<i>S. salastianum</i> Ochoa	2	Ochoa, 1989a, 1999
<i>S. ×sambucinum</i> Rydb.	5	Sidorov, 1937; Bulkasov, 1938a; Swaminathan and Howard, 1953; Matsubayashi and Misoo, 1977; 1 new report
<i>S. sanctae-rosae</i> Hawkes	13	Hawkes, 1954; Gottschalk and Peters, 1955; Bamberg <i>et al.</i> , 1996
<i>S. sandemanii</i> Hawkes	5	Ochoa, 1978; Bamberg <i>et al.</i> , 1996; Salas <i>et al.</i> , 2001
<i>S. santolallae</i> Vargas	9	Hawkes, 1956a; Marks, 1965; Bamberg <i>et al.</i> , 1996; Ochoa, 1999; Salas <i>et al.</i> , 2001

<i>S. sarasareae</i> Ochoa	4	Ochoa, 1988b, 1999
<i>S. sawyeri</i> Ochoa	4	Ochoa, 1981e, 1999; Salas <i>et al.</i> , 2001
<i>S. saxatilis</i> Ochoa	1	Ochoa, 1992b
<i>S. scabrifolium</i> Ochoa	4	Ochoa, 1999; Bamberg <i>et al.</i> , 1996
<i>S. schenckii</i> Bitter		15 Bamberg <i>et al.</i> , 1996; 7 new reports
<i>S. ×setulosistylium</i> Bitter	1	Gilles, 1955
<i>S. simplicissimum</i> Ochoa	5	Ochoa, 1989b, 2003; Salas <i>et al.</i> , 2001
<i>S. soestii</i> Hawkes and Hjert.	1	Ochoa, 1985
<i>S. sogarandinum</i> Ochoa	24	24: Ochoa, 1978, 1999, 2003; Bamberg <i>et al.</i> , 1996; Salas <i>et al.</i> , 2001
<i>S. solisii</i> Hawkes	1	Ochoa, 1982a
<i>S. sparsipilum</i> (Bitter) Juz.	112	24: Juzepczuk, 1937; Bukasov, 1938a; Hawkes, 1944; Ochoa, 1958, 1990, 1999, 2003; Bamberg <i>et al.</i> , 1996;
and Bukasov <sup>m</sup>	2	36: Ochoa, 1999, 2003; Salas <i>et al.</i> , 2001
<i>S. spegazzinii</i> Bitter	64	Ochoa, 1978, 13 new reports
<i>S. stenophyllidium</i> Bitter	23	Brücher, 1957b; Bamberg <i>et al.</i> , 1996; 3 new reports
<i>S. stoloniferum</i> Schltl. <sup>n</sup>	356	Bamberg <i>et al.</i> , 1996; 10 new reports
<i>S. tacnaense</i> Ochoa	4	Smith, 1927; Clark, 1929; Rybin, 1929, 1933; Longley and Clark, 1930; Bukasov, 1933, 1937b; Propach, 1937a; Ivanov, 1939; Hawkes, 1944, 1956a; Koopmans, 1951; Okuno, 1951; Swaminathan, 1954; Wangenheim, 1954; Gilles, 1955; Gottschalk and Peters, 1956; Marks, 1956, 1965; Matsubayashi, 1962a; Marks <i>et al.</i> , 1965; Sangowawa and Choudhuri, 1986; Sangowawa and Adama, 1994; Watanabe and Orrillo, 1994; Bamberg <i>et al.</i> , 1996; 114 new reports
<i>S. subpanduratum</i> Ochoa	1	Ochoa, 1979b
<i>S. ×sucrense</i> Hawkes	41	Hawkes, 1944; Gilles, 1955; Ochoa, 1980a, 1990; Bamberg <i>et al.</i> , 1996; 10 new reports
<i>S. sucubunense</i> Ochoa		2 Castillo and Spooner, 1997
<i>S. tacnaense</i> Ochoa	4	Ochoa, 1978; Ochoa, 1999; Salas <i>et al.</i> , 2001
<i>S. tapoense</i> Ochoa	3	Ochoa, 1980b, 1999
<i>S. tarapatanum</i> Ochoa	4	Ochoa, 1977, 1999; Salas <i>et al.</i> , 2001

<i>S. taricense</i> Hawkes	76	Hawkes, 1944; Gilles, 1955; Walker, 1959; Ochoa, 1980a, 1990; Bamberg <i>et al.</i> , 1996; 8 new reports
<i>S. tarnii</i> Hawkes and Hjert.	10	Bamberg <i>et al.</i> , 1996; 4 new reports
<i>S. taulisense</i> Ochoa	1	Ochoa, 1981a
<i>S. trifidum</i> Correll	13	Bamberg <i>et al.</i> , 1996; 2 new reports
<i>S. trinitense</i> Ochoa	3	Ochoa, 1992a, 1999
<i>S. tundalomense</i> Ochoa		8 Ochoa, 1982a, 1993; Watanabe and Orrillo, 1994; Bamberg <i>et al.</i> , 1996
<i>S. tuquerrense</i> Hawkes	19	Hawkes, 1954; Ochoa, 1982a, 1993; Watanabe and Orrillo, 1994; Bamberg <i>et al.</i> , 1996; Castillo and Spooner, 1997; 1 new report
<i>S. ugentii</i> Hawkes and K. A. Okada	5	Hawkes and Okada, 1988; Spooner <i>et al.</i> , 1994; 2 new reports
<i>S. urubambae</i> Juz.	18	Ochoa, 1992a, 1999; Salas <i>et al.</i> , 2001
<i>S. ×vallis-mexici</i> Juz. <sup>o</sup>	8	2 <b>36:</b> Bukasov, 1933; Rybin, 1933; Juzepczuk, 1937; Perlova, 1939; Tétry, 1941; Marks, 1956
<i>S. velardei</i> Ochoa	2	72: Tétry, 1941; Gilles, 1955
<i>S. venturii</i> Hawkes and Hjert.	6	Ochoa, 1978; Salas <i>et al.</i> , 2001
<i>S. vernei</i> Bitter and Wittm.	52	Bamberg <i>et al.</i> , 1996; 5 new reports
<i>S. verrucosum</i> Schltdl. <sup>p</sup>	55	Hjert.
	1	Hawkes, 1944; Brücher and Ross, 1953; Brücher, 1954; Gilles, 1955; Gottschalk and Peters, 1955; Wangenheim, 1957; Fiedler and Schreiter, 1959; Lebedeva, 1960a,b; Bamberg <i>et al.</i> , 1996; 3 new reports
	2	<b>24:</b> Propach, 1937b; Sidorov, 1937; Bulkasov, 1938a; Hawkes, 1944, 1956b; Lamm, 1945; Okuno, 1951; Swaminathan and Hougas, 1954; Gilles, 1955; Marks, 1956, 1965; Magoon <i>et al.</i> , 1958; Lebedeva, 1959, 1960b; Bamberg <i>et al.</i> , 1996; 13 new reports
		<b>36:</b> Gilles, 1955
		<b>48:</b> Gilles, 1955; 1 new report
<i>S. vidaurrei</i> Cárdenas	19	Ochoa, 1980a, 1990; Bamberg <i>et al.</i> , 1996; 1 new report
<i>S. ×virsoii</i> K. A. Okada and A. M. Clausen	1	Okada and Clausen, 1985
<i>S. violaceimarmoratum</i>	8	Ochoa, 1980a, 1990; Bamberg <i>et al.</i> , 1996

Bitter	<i>S. virgultorum</i> (Bitter)	1	Ochoa, 1990
Cárdenas and Hawkes			Juzepczuk, 1937; Shepeleva, 1937; Sidorov, 1937; Bukasov, 1938a; Gilles, 1955; Ochoa, 1999; Salas <i>et al.</i> , 2001
<i>S. witmackii</i> Bitter <sup>a</sup>	23	No reports	
<i>S. woodsonii</i> Correll			Ochoa, 1999, 2003
<i>S. yamobambense</i> Hawkes	2		<b>24:</b> Hawkes, 1954; Ochoa, 1999; Spooner <i>et al.</i> , 1994
<i>S. yungasense</i> Hawkes	7	5	<b>36:</b> Spooner <i>et al.</i> , 1994; Ochoa, 1999; Salas <i>et al.</i> , 2001

<sup>a</sup> The taxonomy follows Spooner and Salas (2006). We do not list intraspecific taxa in the table but note them below when they relate to cytotype.

<sup>b</sup> "New reports" are first reported here.

<sup>c</sup> Based on morphological and AFLP data, Kardolus (1998) recognized a new subspecies of *S. acaule*, subsp. *palmirensis*. Although it has the hexaploid chromosome number and overall morphological similarity to *S. albicans*, AFLP data influenced him to classify it in *S. acaule* (typically tetraploid).

<sup>d</sup> This tetraploid report is based on a report listed under *S. pichinchense* Bitter, a name that Spooner *et al.* (1993) place in synonymy with *S. andeanum*. This report may be from *S. tuquerrense*, known to occur in the area of Ochoa's collection.

<sup>e</sup> The *S. brevicaule* complex is a group of approximately 30 taxa of diploids, tetraploids, and hexaploids that are difficult to distinguish and some may need to be placed in synonymy (Van den Berg *et al.*, 1998; Miller and Spooner, 1999). The tetraploid reports are of recent collections and their identity may change.

<sup>f</sup> Brücher (1975) suggested that *S. calvescens* is a triploid cytotype of *S. chacoense*.

<sup>g</sup> Spooner *et al.* (2004) placed the name *S. semidemissum* Juz. (formerly recognized as a pentaploid species) under synonymy with *S. demissum* because they were unable to reliably distinguish them morphologically.

<sup>h</sup> Okada and Clausen (1982) described *S. ×indunii* as a natural hybrid between *S. acaule* and *S. megistacrolobum*, found in northern Argentina in the Department of Jujuy. Brücher (1959) first documented this triploid hybrid (without mentioning vouchers) from this area.

<sup>i</sup> Ochoa (1990) combined the name *S. gourlayi* (formerly with diploid and tetraploid populations) under *S. leptophyes* (formerly with only diploids).

<sup>j</sup> Ochoa (1999) distinguished *S. medians* var. *medians* (triploid) from var. *autumnale* (diploid) on ploidy and on morphological traits that we do not think are diagnostic; the varieties may not be worthy of taxonomic recognition.

<sup>k</sup> Gilles (1955) reported a somatic ploidy determination for *S. polyadenium* of  $n = 12$  chromosomes and stated that it was a natural monoploid that was not very fertile, but that its few seeds produced diploid plants of 24 chromosomes.

<sup>l</sup> Okada and Hawkes (1978) studied 41 "clones" of *S. ×rechei* from collection numbers *Hawkes* 3357, 3359, 3363, 3364, and *Okada* 2703. *Hawkes* 3359 showed diploid and triploid somatic reports ( $2n = 24, 36$ ), whereas the other collections were all diploid.

<sup>m</sup> Ochoa (1978) reported two collections of *S. sparsipilum* from Peru (*Ochoa*, 3043, 3044) as  $2n = 48$ , but he did not list these two collections in his subsequent flora of Peru (1999). Ochoa (1980a) reported a collection of *S. sparsipilum* from Bolivia (*Ochoa*, 11926) as  $2n = 48$ ; however, he changed the identity of this to *S. ×sucreense* in Ochoa (1990).

<sup>n</sup> Gottschalk and Peters (1956, p. 361) list five collections of *S. stoloniferum* (as *S. ajuscoense*, *S. antipoviczii*, *S. tlaxcalense*, *S. malinchense*, *S. sendleri*) as  $n = 12$ , but this conflicts with information in the text (p. 359) and this appears to be a typographical error.

<sup>o</sup> Gilles (1955) provided a report of  $2n = 72$  for *S. ×vallis-mexici* (without locality) and suggested that this was an autohexaploid of this typically triploid hybrid.

<sup>p</sup> Gilles (1955) provided five diploid, one triploid, and one tetraploid report from different clones of *S. verrucosum* received from Germany. All of them looked similar to each other and to other typically diploid *S. verrucosum*, except that some tetraploids looked like *S. demissum* (typically hexaploid). The triploids and tetraploids may be artificial interspecific hybrids.

<sup>q</sup> Bukasov (1937b, 1938a) and Sidorov (1937) list reports of *S. wittmackii* as  $2n = 48$ , but list no vouchers for these. All reports could be of the same collection and we do not tabulate these atypical reports.

## REFERENCES

- Bamberg, J.B., Martin, M.W., Schartner, J.J. & Spooner D.M. (1996) Inventory of tuber-bearing *Solanum* species. Catalogue of potato germplasm – 1996. National Research Support Program 6, Sturgeon Bay, WI, USA.
- Brücher, H. (1954) Cytologische und ökologische Beobachtungen an nordargentinischen *Solanum*-Arten der Section *Tuberarium*. Teil I. Die Wildkartoffel-Arten des Aconquija-Gebirges. *Züchter*, **24**, 281-295.
- Brücher, H. (1957a) Kritische Betrachtungen zur Nomenklatur Argentinischer Wildkartoffeln. III. Die serie *Cuneoalata*. *Züchter*, **27**, 77-80.
- Brücher, H. (1957b) Kritische Betrachtungen zur Nomenklatur Argentinischer Wildkartoffeln. IV. Die serie *Tuberosa*. *Züchter*, **27**, 353-357.
- Brücher, H. (1959) Kritische Bertachtungen zur Nomenklatur Argentinischer Wildkartoffeln. V. Die serie *Acaulia*. *Züchter*, **29**, 149-156.
- Brücher, H. (1975) Brasilien Wildkartoffeln. Die Sektion Tuberarium des Genus *Solanum* in Südbrasilien. *Berichte der Deutschen Botanischen Gesellschaft*, **88**, 399-410.
- Brücher, H. (1967) *Solanum kurtzianum* eine Nematodenresistente Wildkartoffel der Argentinischen Halbwüste und ihre Systematische position. *Kurtziana*, **4**, 143-151.
- Brücher, H. (1970) Chromosomenzahlen Argentinischer, Chilenischer und Venezolanischer Wildkartoffeln (*Solanum*, sect. *Tuberarium*). *Cytologia*, **35**, 153-170.
- Brücher, H. (1976) Zur Wiederentdeckung von *Solanum commersoni* Dunal nach 200 Jahren am Originalstandort in Uruguay. *Angewandte Botanik*, **50**, 97-111.
- Brücher, E.H. & Ross H. (1953) La importancia de las especies tuberíferas de *Solanum* del noroeste Argentino como fuente de resistencia a las enfermedades. *Lilloa*, **26**, 453-488.
- Bukasov, S.M. (1933) The potatoes of South America and their breeding possibilities. *Trudy po Prikladnoj Botanike, Genetike i Selekciu (Bulletin of Applied Botany, Genetics, and Plant Breeding)* Supplement, **58**, 1-192 (In Russian, English summary.)
- Bukasov, S.M. (1937a) Cuatro nuevas especies de *Solanum* de la flora Argentina. *Revista Argentina de Agronomia*, **4**, 238-240.
- Bukasov, S.M. (1937b) Potato Breeding. In, N. I. Vavilov. 1937. Teoreticheskie Osnovi Seleksii rasteniy (Theoretical bases of plant breeding). Vol. 3. Selections of potato, vegetables, cabbage, fruits, small berry fruits and industrial crops, 3-76. State Publishing House 'Kolkhoz-Sovkhoz'. Moscow-Leningrad, USSR.
- Bukasov, S.M. (1938a) Interspecific hybridization in the potato. *Izvestiya Akademii Nauk SSSR*, **3**, 711-732.
- Bukasov, S.M. (1938b) *Solanum boergeri* Buk. a new potato species from Uruguay. *Doklady Akademii Nauk SSSR*, **20**, 177-179.
- Bukasov, S.M. (1940a) New wild potato species in Argentina and Uruguay. *Vestnik Sotsialisticheskogo Rastenievodstva SSSR*, **4**, 3-12.
- Bukasov, S.M. (1940b) Una nueva especie de *Solanum* del subgénero Tuberarium de la república Argentina. *Revista Argentina de Agronomía*, **7**, 363-365.
- Bukasov, S.M. & Lechnovich, V.S. (1935) Importancia en la fitotecnia de las papas indígenas de América del sur. *Revista Argentina de Agronomía*, **2**, 173-183.
- Cárdenas, M. & Hawkes, J.G. (1946) New and little-known wild potato species from Bolivia and Peru. *Journal of the Linnean Society, Botany*, **53**, 91-108.
- Castillo, R.O. & Spooner, D. M. (1997) Phylogenetic relationships of wild potatoes, *Solanum* series *Conicibaccata* (Sect. *Petota*). *Systematic Botany*, **22**, 45-83.
- Choudhuri, H.C. (1943) Cytological studies in the genus *Solanum* I. Wild and native cultivated "diploid" potatoes. *Transactions of the Royal Society of Edinburgh*, **61** pt.1, 113-135.
- Choudhuri, H.C. (1944) Cytological and genetical studies in the genus *Solanum* II. Wild and native cultivated "diploid" potatoes. *Transactions of the Royal Society of Edinburgh*, **61** pt.1, 199-219.
- Clark, C.F. (1929) A *Solanum* hybrid resulting from a cross between *S. fendleri* and *S. chacoense*. *Journal of Heredity*, **20**, 391-394.
- Clausen, A.M. & Okada, K.A. (1987) The subspecies of *Solanum gourlayi* Hawkes. *Phytologia*, **62**, 165-167.
- Clausen, A.M. & Spooner, D.M. (1998) Molecular support for the hybrid origin of the wild potato species *Solanum ×rechei* (*Solanum* sect. *Petota*). *Crop Science*, **38**, 858-865.
- De Vilmorin, R. (1929) Étude cytologique du *Solanum commersonii*. *Archives d'Anatomie Microscopique et de Morphologie Expérimentale*, **25**, 382-387.

- De Vilmorin, R. & Simonet, M. (1927) Variations du nombre des chromosomes chez quelques Solanées. *Comptes Rendus Hebdomadaires des Séances de l'Académie des Sciences (Paris)*, **184**, 164-166.
- De Vilmorin, R. & Simonet, M. (1928) Recherches sur le nombre des chromosomes chez les Solanées. *Zeitschrift für Induktive Abstammungs und Vererbungslehre Suppl.*, **2**, 1520-1536.
- Diers, L. (1961) Der Anteil an Polyploiden in den Vegetationsgürteln der Westkordillere Perus. *Zeitschrift für Botanik*, **49**, 437-488.
- Fiedler, H. & Schreiter, J. (1959) Das Pachytän-Genom von *Solanum vernei*. *Zeitschrift für Inductive Abstammungs und Vererbungslehre*, **90**, 62-65.
- Gilles, A. (1955) Recherches cytogénétiques sur les *Solanum* (section *Tuberarium*) I. Nombres chromosomiques et associations méiotique. *Cellule*, **57**, 7-31.
- Gilles, A. (1960) Recherches cytogénétiques sur les *Solanum* section *Tuberarium* VI. Les croisements réciproques entre *S. demissum* et *S. tuberosum*. *Bulletin de la Société Royale de Botanique de Belgique*, **92**, 5-9.
- Gottschalk, W. (1954) Die Chromosomenstruktur der Solanaceen unter Berücksichtigung phylogenetischer Fragestellungen. *Chromosoma*, **6**, 539-626.
- Gottschalk, W. & Peters, N. (1955) Die Chromosomenstruktur diploider Wildkartoffel-Arten und ihr Vergleich mit der Kulturtarotoffel. Ein Beitrag zum abstammungsproblem der kartoffel. *Zeitschrift für Pflanzenzüchtung*, **34**, 351-374.
- Gottschalk, W. & Peters, N. (1956) Das Konjugationsverhalten partiell homologer Chromosomen. *Chromosoma*, **7**, 708-725.
- Hawkes, J.G. (1944) Potato collecting expeditions in Mexico and South America.II.Systematic classification of the collections. *Bulletin of the Imperial Bureau of Plant Breeding and Genetics*, **1944**, 1-142.
- Hawkes, J.G. (1954) New *Solanum* species in subsection *Hyperbasarthrum* Bitt. *Annals and Magazine of Natural History Series*, **12**, 689-710.
- Hawkes, J.G. (1956a) A revision of the tuber bearing Solanums. *Annual Report of the Scottish Plant Breeding Station*, **1956**, 37-109.
- Hawkes, J.G. (1956b) Hybridization studies on four hexaploid *Solanum* species in series *Demissa* Bitt. *The New Phytologist* **55**, 191-205.
- Hawkes, J.G. (1990) The potato, evolution, biodiversity and genetic resources. Belhaven Press, Oxford, UK.
- Hawkes, J.G. & Hjerting, J.P. (1969) The potatoes of Argentina, Brazil, Paraguay and Uruguay, a biosystematic study. Oxford University Press.Oxford, UK.
- Hawkes, J.G. & Okada, K.A. (1988) New tetraploid *Solanum* species from Bolivia, *S. hoopesii* and *S. ugentii*. *Phytologia*, **64**, 325-329.
- Haynes, F.L. (1963) Meiotic abnormalities in *Solanum berthaultii*. *Journal of Heredity*, **54**, 8-12.
- Haynes, F.L. (1964) Pachytene chromosomes of *Solanum canasense*. *Journal of Heredity*, **55**, 168-173.
- Hermsen, J.G.Th. (1969) Induction of haploids and aneuploids in colchicine-induced tetraploid *Solanum chacoense* Bitt. *Euphytica*, **18**, 183-189.
- Hermsen, J.G.Th. & De Boer, A.J.E. (1971) The effect of colchicine treatment on *Solanum acaule* and *S.bulbocastanum*; a complete analysis of ploidy chimeras in *S.bulbocastanum*. *Euphytica*, **20**, 171-180.
- Ivanov, V.I. (1939) Formation of polyploid forms in *Solanum* sect. *Tuberarium*. *Doklady Akademii Nauk SSSR*, **24**, 485-487.
- Ivanovskaya, E.V. (1939) Cytological study of *Solanum millanii* Bitt.et Lechn. *Doklady Akademii Nauk SSSR*, **24**, 391-393.
- Jørgensen, C.A. (1928) The experimental formation of heteroploid plants in the genus *Solanum*. *Journal of Genetics*, **19**, 133-210.
- Juzepczuk, S.W. (1937) New species of the genus *Solanum* L. in the group Tuberarium Dun. *Izvestija Akademii Nauk SSSR*, **2**, 295-331.
- Kameraz, A.J. (1940) Wild species as initial material in potato breeding. *Vestnik Sotsialisticheskogo Rastenievodstva USSR*, **4**, 13-30.
- Kardolus, J.P. (1998) *A biosystematic analysis of Solanum acaule*. Ph.D.Thesis, Wageningen Agricultural University, Wageningen, The Netherlands.
- Koopmans, A. (1951) Cytogenetic studies on *Solanum tuberosum* L. & some of its relatives. *Genetica*, **25**, 193-337.
- Lamm, R. (1943) Notes on an octaploid *Solanum punae* plant. *Hereditas*, **29**, 193-195.
- Lamm, R. (1945) Cytogenetic studies in *Solanum*, Sect. *Tuberarium*. *Hereditas*, **31**, 1-128.
- Lebedeva, N.A. (1958) Production of polyploids of *Solanum polyadenium* Greenm. *Doklady Akademii Nauk SSSR*, **120**, 890-892.

- Lebedeva, N.A. (1959) Comparative study of diploids and tetraploids of *Solanum verrucosum* Schlechtd. *Doklady Akademii Nauk SSSR*, **125**, 194-196.
- Lebedeva, N.A. (1960a) Production of polyploids of the wild potato species *Solanum bulbocastanum* Dun., *S. cardiophyllum* Lindl. & *S.vernei* Bitt.et Wittm. *Doklady Akademii Nauk SSSR*, **134**, 1211-1213.
- Lebedeva, N.A. (1960b) Experimental poliploidy in potato breeding. *Na Bolgarskata Akadna Naukite* (ed. by Izsledvania v Pamet na Doncho Koctov), pp. 99-113, Sofia, Bulgaria.
- Lebedeva, N.A. (1962) Polyploids of some potato species. *Trudy Moskovskogo Obščestva Ispytatelej Prirody Moscow*, **5**, 215-221.
- Lee, H.K. & Erickson, H.T. (1979) Utilization of tuber-bearing *Solanum* triploids in studies of species differentiation. *Korean Journal of Botany*, **22**, 71-80.
- Lhoas, P. (1956) Recherches cytogénétiques sur les *Solanum*, section *Tuberarium* V. Analyse statistique des chromosomes somatiques et relations phylogéniques. *Cellule*, **57**, 357-368.
- Longley, A.E. & Clark, C.F. (1930) Chromosome behavior and pollen production in the potato. *Journal of Agricultural Research*, **41**, 867-888.
- Magoon, M.L., Cooper, D.C. & Hougas, R.W. (1958) Cytogenetic studies of some diploid Solanums section *Tuberarium*. *American Journal of Botany*, **45**, 207-221.
- Marks, G.E. (1955) Cytogenetic studies in tuberous *Solanum* species I. Genomic differentiation in the group *Demissa*. *Journal of Genetics*, **53**, 262-269.
- Marks, G.E. (1956) The cytology of *Solanum vallis-mexicae*. *Annual Report of the John Innes Horticultural Institution (1955)*, **47**, 20.
- Marks, G.E. (1965) Cytogenetic studies in tuberous *Solanum* species III. Species relationships in some South and Central American species. *The New Phytologist* 64, 293-306.
- Marks, G.E. (1966) The origin and significance of intraspecific polyploidy, Experimental evidence from *Solanum chacoense*. *Evolution*, **20**, 552-557.
- Marks, G.E. (1968) Structural hybridity in a tuberous *Solanum* hybrid. *Canadian Journal of Genetics and Cytology*, **10**, 18-23.
- Marks, G.E. (1969) The pachytene chromosomes of *Solanum clarum*. *Caryologia*, **22**, 161-167.
- Marks, G.E., McKee, R.K. & Harborne, J.B. (1965) Double chromosome reduction in a tetraploid *Solanum*. *Nature*, **208**, 359-361.
- Masuelli, R.W. & Camadro, E.L. (1992) Cytological analysis and fertility of *Solanum commersonii* Dun.x *Solanum gourlayi* Haw. triploid hybrids. *Cytologia*, **57**, 161-166.
- Matsubayashi, M. (1962a) Tripolar division in *Solanum longipedicellatum* Bitt. *Chromosome Information Service*, **3**, 7-9.
- Matsubayashi, M. (1962b) Studies on the species differentiation in *Solanum*, sect. *Tuberarium* VIII. Genomic relationships between *S. demissum* and certain diploid *Solanum* species. *Sei-ken jihō* (Report of the Kihara Institute for Biological Research), **13**, 57-68.
- Matsubayashi, M. & Misoo, S. (1977) Species differentiation in *Solanum*, sect. *Tuberarium* IX. Genomic relationships between three Mexican diploid species. *Japanese Journal of Breeding*, **27**, 241-250.
- Miller, J.T. & Spooner, D.M. (1999) Collapse of species boundaries in the wild potato *Solanum brevicaule* complex (Solanaceae, S. sect. Petota): molecular data. *Plant Systematics and Evolution*, **214**, 103-130.
- Moscone, E.A. (1992) Estudios de cromosomas meióticos en Solanaceae de Argentina. *Darwiniana*, **31**, 261-297.
- Ochoa, C.M. (1958) Expedición colectora de papas cultivadas a la cuenca del Lago Titicaca. Determinación sistemática y número cromosómico del material colectado. *Investigaciones en Papa No. 1*. Ministerio de Agricultura. Programa Cooperativo de Experimentación Agropecuaria (PCEA), Lima, Perú.
- Ochoa, C.M. (1972a) Un nuevo taxon y sinonimia de algunas especies tuberíferas peruanas de *Solanum*. *Darwiniana*, **17**, 416-432.
- Ochoa, C.M. (1972b) Nueva especie de papa silvestre diploide para el Perú. *Boletín de la Sociedad Argentina de Botánica*, **14**, 330-334.
- Ochoa, C.M. (1973) La serie tuberífera cuneoalata en el norte del Perú. *Anales Científicos*, **11**, 157-160.
- Ochoa, C.M. (1974) Nuevos *Solanum* tuberíferos silvestres del Perú. *Boletín de la Sociedad Peruana de Botánica*, **7**, 11-19.
- Ochoa, C. (1977) Nueva papa silvestre de la serie *Tuberosa*. *Anales Científicos*, **15**, 1.
- Ochoa, C.M. (1978) In: IOPB chromosome number reports LXII. *Taxon*, **27**, 519-535.
- Ochoa, C.M. (1979a) Nueva papa silvestre peruana de la serie Tuberosa. *Kurtziana*, **12-13**, 183-185.
- Ochoa, C.M. (1979b) Nueva papa silvestre venezolana de la serie *Conicibaccata*. *Biota*, **11**, 331-333.
- Ochoa, C.M. (1980a) In Chromosome number reports LXVIII. *Taxon*, **29**, 533-534.

- Ochoa, C.M. (1980b) New taxa of *Solanum* from Peru and Bolivia. *Phytologia*, **46**, 223-225.
- Ochoa, C.M. (1981a) *Solanum taulisense*, nueva especie tuberífera Peruana. *Lorentzia*, **4**, 13-15.
- Ochoa, C.M. (1981b) A new variety of the Bolivian tuber-bearing *Solanum capsicibaccatum*. *Phytologia* **50**, 181-182.
- Ochoa, C.M. (1981c) Two new tuber-bearing *Solanum* from South America. *Phytologia*, **48**, 229-232.
- Ochoa, C.M. (1981d) *Solanum irosinum*, new Peruvian tuber bearing species resistant to *Phytophthora infestans*. *American Potato Journal*, **58**, 131-135.
- Ochoa, C.M. (1981e) *Solanum sawyeri*, a new wild potato species from the Peruvian tropics. *American Potato Journal*, **58**, 649-652.
- Ochoa, C.M. (1981f) *Solanum antacochense*, a new wild Peruvian species. *American Potato Journal*, **58**, 127-129.
- Ochoa, C.M. (1981g) *Solanum correllii*, a new tuber bearing species from Ecuador. *American Potato Journal*, **58**, 223-225.
- Ochoa, C.M. (1981h) *Solanum chilliasense*, nueva especie Tuberífera de la serie *Piurana*. *Lorentzia*, **4**, 9-11.
- Ochoa, C.M. (1982a) In: IOPB chromosome number reports LXXV. *Taxon*, **31**, 342-343.
- Ochoa, C.M. (1982b) *Solanum chrysanthemum* nueva especie tuberífera cisandina. *Hickenia*, **1**, 317-320.
- Ochoa, C.M. (1982c) Determinations of chromosome number (2n) and Endosperm Balance Number (EBN) in some little known tuber bearing *Solanum*. *Phytologia*, **73**, 180-182.
- Ochoa, C.M. (1983a) *Solanum hapalosum* (Solanaceae). Nueva especie Peruana de la serie *Tuberosa*. *Boletín de la Sociedad Argentina Botánica*, **22**, 297-299.
- Ochoa, C.M. (1983b) *Solanum nemorosum*, A new hexaploid tuber-bearing species from Peru. *American Potato Journal*, **60**, 389-392.
- Ochoa, C.M. (1983c) *Solanum bombycinum*, a new tuber-bearing tetraploid species from Bolivia. *American Potato Journal*, **60**, 849-852.
- Ochoa, C.M. (1983d) *Solanum neovavilovii*, A new wild potato species from Bolivia. *American Potato Journal*, **60**, 919-923.
- Ochoa, C.M. (1984b) *Solanum venatoris* (sect. *Petota*), A new species from Bolivia. *Phytologia*, **55**, 297-298.
- Ochoa, C.M. (1985) Karyotaxonomic studies on wild Bolivian tuber-bearing *Solanum*, sect.*Petota*.(II). *Phytologia*, **57**, 315-324.
- Ochoa, C.M. (1987a) *Solanum tenellum* (sect. *Petota*), nova specie Peruviana. *Phytologia*, **63**, 455-456.
- Ochoa, C.M. (1987b) *Solanum longiusculus* (sect. *Petota*), nova specie Peruviana. *Phytologia*, **63**, 329-330.
- Ochoa, C.M. (1987c) *Solanum aymaraesense* (sect. *Petota*), nova specie Peruviana. *Phytologia*, **64**, 36-37.
- Ochoa, C.M. (1988a) *Solanum bill-hookeri*, new wild potato species from Peru. *American Potato Journal*, **65**, 737-740.
- Ochoa, C.M. (1988b) *Solanum sarasareae* (sect. *Petota*), nova specie Peruviana. *Phytologia*, **64**, 245-246.
- Ochoa, C.M. (1989a) *Solanum salasianum*, New wild tuber-bearing species from Peru. *American Potato Journal*, **66**, 235-238.
- Ochoa, C.M. (1989b) *Solanum* Ser. *Simplicissima*, nueva serie tuberífera de la sect. *Petota* (Solanaceae). *Revista de la Academia Colombiana de Ciencias Exactas, Físicas y Naturales Correspondiente de la Española*, **17**, 321-323.
- Ochoa, C.M. (1990) The potatoes of South America (Bolivia). Cambridge University Press, Cambridge.
- Ochoa, C.M. (1992a) Determinations of chromosome number (2n) and endosperm balance number (EBN) in some little known tuber bearing *Solanum*. *Phytologia*, **73**, 180-182.
- Ochoa, C.M. (1992b) *Solanum saxatile*, a new wild potato species from Peru. *Phytologia*, **73**, 378-380.
- Ochoa, C.M. (1992c) *Solanum lobbianum* Bitter, a little known Colombian tuber bearing species. *Phytologia*, **73**, 183-185.
- Ochoa, C.M. (1993) Karyotaxonomic studies on wild Ecuadorian tuber-bearing *Solanum*, sect.*Petota*. *Phytologia*, **75**, 422-431.
- Ochoa, C.M. (1994) *Solanum arahuayum* (sect.*Petota*), nova specie Peruviana. *Phytologia*, **77**, 96-98.
- Ochoa, C.M. (1998) *Solanum ortegae*, a new Peruvian species from sect.*Petota*. *Phytologia*, **85**, 271-272.
- Ochoa, C.M. (1999) *Las papas de Sudamérica, Perú (Parte I)*. Allen Press, Lawrence, Kansas, USA.
- Ochoa, C.M. (2003) *Las papas del Perú, base de datos 1947-1997*. International Potato Center, Lima, Peru.
- Okada, K.A. (1981) High frequency of triploids of *Solanum microdontum* subsp. *gigatophyllum* on the western mountain ranges of provinces La Rioja and Catamarca, Argentina. *Bulletin of the Torrey Botanical Club*, **108**, 331-337.
- Okada, K.A. & Clausen, A.M. (1982) Natural hybridization between *Solanum acaule* Bitt. & *S. megistacrolobum* Bitt. in the province of Jujuy, Argentina. *Euphytica*, **31**, 817-835.
- Okada, K.A. & Clausen, A.M. (1985) Natural triploid hybrids between *Solanum acaule* Bitter and *S.infundibuliforme* Philippi in the province of Jujuy, Argentina. *Euphytica*, **34**, 219-231.
- Okada, K.A. & Hawkes, J.G. (1978) *Solanum ×rechei*, especie silvestre de papas de origen híbrido de la Sierra de Famatina (Provincia de La Rioja, Argentina). *Kurtziana*, **11**, 55-74.

- Okuno, S. (1951) Cytological studies on potatoes, with some remarks on genetical experiments. Part I. *Japanese Journal of Genetics*, **26**, 79-103.
- Oppenheimer, H.C. (1933) Cytogenetische Untersuchungen an Bastarden Knollentragender *Solanum*-Arten I. *Solanum chacoense* Bitt.x *S.tuberosum* L. *Zeitschrift für Induktive Abstammungs und Vererbungslehre*, **65**, 72-98.
- Perlova, R.L. (1939) Production of an autohexaploid *Solanum vallis-mexici* Juz. by means of its cultivation at the Pamir. *Doklady Akademii Nauk SSSR*, **25**, 415-418.
- Propach, H., von (1937a) Cytogenetische Untersuchungen in der Gattung *Solanum*, sect. *Tuberarium* I. Die Sekundärpaarung. *Zeitschrift für Induktive Abstammungs und Vererbungslehre*, **72**, 555-563.
- Propach, H., von (1937b) Cytogenetische Untersuchungen in der Gattung *Solanum*, sect. *Tuberarium* II. Triploide und tetraploide Artbastarde. *Zeitschrift für Induktive Abstammungs und Vererbungslehre*, **73**, 143-154.
- Ratera, E.L. (1938) Determinación del número de cromosomas de varias especies de papas indígenas de la república Argentina. *Revista de la Facultad de Agronomía y Veterinaria (Buenos Aires)*, **1**, 1-8.
- Ratera, E.L. (1940) Determinación del numero de cromosomas de los *Solanum* aculeados de los alrededores de Buenos Aires. *Revista de la Facultad de Agronomía y Veterinaria (Buenos Aires)*, **1**, 1-7.
- Ratera, E.L. (1944) Número de cromosomas de algunas Solanáceas Argentinas. *Revista de la Facultad de Agronomía y Veterinaria (Buenos Aires)*, **2**, 105-110.
- Rybin, V.A. (1929) Karyological investigation on some wild growing and indigenous cultivated potatoes of America. *Trudy po Prikladnoj Botanike, Genetike i Selekciu* (Bulletin of Applied Botany, Genetics, and Plant Breeding), **20**, 655-720.
- Rybin, V.A. (1933) Cytological investigation of the South American cultivated and wild potatoes, and its significance for plant breeding. *Trudy po Prikladnoj Botanike, Genetike i Selekciu* (Bulletin of Applied Botany, Genetics, and Plant Breeding) Seria II, **2**, 3-100.
- Salaman, R.N. (1926) *Potato varieties*. Cambridge University Press, Cambridge, UK.
- Salas, A.R., Spooner, D.M., Huamán, Z., Torres Maita, R.V., Hoekstra, R., Schüler, K. & Hijmans, R.J. (2001) taxonomy and new collections of wild potato species in central and southern Peru in 1999. *American Journal of Potato Research*, **78**, 197-207.
- Sangowawa, B.G. (1989) Meiotic studies in a wild tetraploid potato (*Solanum hjertingii* Hawkes). *Cytologia*, **54**, 617-626.
- Sangowawa, B.B. & Adama, K.A. (1994) Meiosis in a wild tetraploid potato (*Solanum fendleri* A.Gray). *Nucleus* (Calcutta), **37**, 136-141.
- Sangowawa, B.G. & Choudhuri, H.C. (1986) Cytological studies in a tetraploid potato (*Solanum polytrichon* Rydb.). *Cytologia*, **51**, 767-776.
- Shepeleva, E.M. (1937) Chromosome morphology of some potato species. *Doklady Academii Nauk SSSR*, **15**, 207-209.
- Sidorov, F.F. (1937) Breeding of potatoes for immunity to *Phytophthora infestans*. *Trudy po Prikladnoj Botanike, Genetike i Selekciu* Seria II, **11**, 5-76.
- Smith, H.B. (1927) Chromosome counts in the varieties of *Solanum tuberosum* and allied wild species. *Genetics*, **12**, 48-92.
- Spooner, D.M. & Clausen, A.M. (1993) Wild potato (*Solanum* sect. *Petota*) germplasm collecting expedition to Argentina in 1990, and status of Argentinian potato germplasm resources. *Potato Research*, **36**, 3-12.
- Spooner, D.M., Castillo-T., R. & López-J., L.. (1993) Synonymy within wild potatoes (*Solanum* sect. *Petota*, Solanaceae), The case of *Solanum andeanum*. *Systematic Botany*, **18**, 209-217.
- Spooner, D.M. & Salas, A. (2006) Structure, biosystematics, and genetic resources. *Handbook of potato production, improvement, and post-harvest management* (ed. by J. Gopal and S.M Paul Khurana) pp.1-39. Haworth's Press, Binghampton, New York.
- Spooner, D.M., Van den Berg, R.G., García, W. & Ugarte, M.L. (1994) Bolivia potato germplasm collecting expeditions 1993, 1994, taxonomy and new germplasm resources. *Euphytica*, **79**, 137-148.
- Spooner, D.M., Van den Berg, R.G. & Bamberg, J.B. (1995) Examination of species boundaries of *Solanum* series *Demissa* and potentially related species in series *Acaulia* and series *Tuberosa* (sect. *Petota*). *Systematic Botany*, **20**, 295-314.
- Spooner, D.M., Van den Berg, R.G., Rivera-Peña, A., Velguth, P., Del Rio, A. & Salas-López, A. (2001) Taxonomy of Mexican and Central American members of *Solanum* series *Conicibaccata* (sect. *Petota*). *Systematic Botany*, **26**, 743-756.
- Spooner, D.M., Van den Berg, R.G., Rodríguez, A., Bamberg, J., Hijmans, R.J. & Lara-Cabrera, S.I. (2004) Wild potatoes (*Solanum* section *Petota*) of North and Central America. *Systematic Botany Monographs*, **68**, 1-209 + 9 plates.

- Swaminathan, M.S. (1954) Nature of polyploidy in some 48-chromosome species of the genus *Solanum*, section *Tuberarium*. *Genetics*, **39**, 59-76.
- Swaminathan, M.S. & Hougas, R.W. (1954) Cytogenetic studies in *Solanum verrucosum* variety *spectabilis*. *American Journal of Botany*, **41**, 645-651.
- Swaminathan, M.S. & Howard, H.W. (1953) The cytology and genetics of the potato (*Solanum tuberosum*) and related species. *Bibliographia Genetica*, **16**, 1-192.
- Tétry, A. (1941) Le Pamir et la naissance d'espèces nouvelles. *Revue Scientifique*, **79**, 190.
- Van den Berg, R.G., Miller, J.T., Ugarte, M.L., Kardolus, J.P., Villand, J., Nienhuis, J. & Spooner, D.M. (1998) Collapse of morphological species in the wild potato *Solanum brevicaule* complex (sect. *Petota*). *American Journal of Botany*, **85**, 92-109.
- Vogt, G.E. & Rowe, P.R. (1968) Aneuploids from triploid-diploid crosses in the series *Tuberosa* of the genus *Solanum*. *Canadian Journal of Genetics and Cytology*, **10**, 479-486.
- Walker, R.I. (1959) Chromosome behaviour in F1 hybrids between *Solanum demissum* and three diploid species. *Bulletin of the Torrey Botanical Club*, **86**, 31-40.
- Wangenheim, K.H. von (1954) Zur Ursache der Kreuzungsschwierigkeiten zwischen *Solanum tuberosum* L. und *S. acaule* Bitt. bzw. *S. stoloniferum* Schlechtd. et Bouché. *Zeitschrift für Pflanzenzüchtung*, **34**, 7-48.
- Wangenheim, K.H. von (1957) Untersuchungen über den Zusammenhang Zwischen Chromosomenzahl und Kreuzbarkeit bei *Solanum*-Arten. *Zeitschrift für Induktive Abstammungs und Vererbungslehre*, **88**, 21-37.
- Watanabe, N.K. & Orrillo, M. (1994) Disomic behavior in polyploid tuber-bearing *Solanum* species. *Japanese Journal of Genetics*, **69**, 637-643.