

## เอกสารอ้างอิง

- กรมวิชาการเกษตร. สถิติพื้นที่ปลูกผัก พ.ศ. 2550.  
<http://www.doae.go.th> เข้าถึง 20 พฤษภาคม 2551
- กรมศุลกากร. 2550.สถิติการส่งออกพริก ทั้งรูปผลสด ซอสพริก พริกแห้ง เครื่องแกงสำเร็จรูป และพริกบดหรือป่นเพื่ออุตสาหกรรม.  
<http://www.customs.go.th> เข้าถึง 1 กันยายน 2550.
- จานุลักษณ์ ขนบดี พรนิภา เลิศศิลป์มงคล และปัทมา ศิริรัษฎา. 2549. รายงานการวิจัย ฉบับสมบูรณ์โครงการ “การศึกษาสถานภาพการผลิต และความสัมพันธ์ของสิ่งแวดล้อม ที่มีผลต่อผลผลิต คุณภาพ และปริมาณสาร capsaicin ในพริกพันธุ์การค้าในเขตจังหวัด นครสวรรค์ สุโขทัย และตาก “. สำนักงานกองทุนสนับสนุนการวิจัย. 96 น.
- จานุลักษณ์ ขนบดี. 2550. พันธุ์พริกการค้าพื้นเมืองของเขตภาคเหนือตอนล่างของประเทศไทย. ตักยภาพการผลิตพริกเพื่ออุตสาหกรรมการส่งออกของไทยในปัจจุบันและอนาคต. คณะเกษตรศาสตร์ มหาวิทยาลัยขอนแก่น : 13 – 16.
- จานุลักษณ์ ขนบดี. 2551. การรวบรวมและศึกษาพันธุ์พริกพื้นเมือง จ. ตาก. ว. วิทย. กษ. 39 (3) (พิเศษ) : 254 - 256.
- จานุลักษณ์ และมุกดา สุขสวัสดิ์. 2551. ความสัมพันธ์ของปริมาณสารแคปไซซินอยด์ของ พริกพื้นเมือง จ. ตาก กับผลผลิตและคุณภาพของดิน. การประชุมวิชาการ เกษตรแห่งชาติ ประจำปี 2551 คณะเกษตรศาสตร์ ทรัพยากรธรรมชาติและ สิ่งแวดล้อม มหาวิทยาลัยนเรศวร จังหวัดพิษณุโลก. 4 น.
- จานุลักษณ์ ขนบดี พรนิภา เลิศศิลป์มงคล และ ปัทมา ศิริรัษฎา. 2551. การพัฒนาพันธุ์พริก โดยชุมชนมีส่วนร่วม. รายงานวิจัยฉบับสมบูรณ์. สำนักงานกองทุนสนับสนุนการวิจัย. 123 น.
- สมาคมเมล็ดพันธุ์พืชแห่งประเทศไทย. 2550. 10 ปี นำเข้า – ส่งออกเมล็ดพันธุ์ไทย. ข่าวสารเมล็ดพันธุ์พืช. ปีที่ 14 ฉบับที่ 1 : 4 – 6.
- Andrews J. Peppers: 1995.The Domesticated Capsicums. University of Texas Press, Austin.
- Bernal, M. A., M.A. Pedreño, A.A. Calderón, R. Muñoz, A. Ros Barceló, and F. Merino de Cáceres. 1993. The subcellular localization of isoperoxidase in *Capsicum annuum* leaves and their different expression in vegetative and flowered plants. Ann. Bot. 72: 415-421
- Bosland, P.W. 1993. .Breeding for quality in capsicum. Capsicum and Eggplant Newsletter, 12 : 25 -31.

- Bosland, P. W. and Jit B. Baral. 2007. 'Bhut Jolokia' The world's hottest known chile pepper is a putative naturally occurring interspecific hybrid. *HortScience* 42: 222-224
- Bosland, P.W. and E.J. Votava. 2002. *Pepper: Vegetable and Spice Capsicums*. CABI Publishing, New York.
- Cotter, D.J. 1980. A review of studies on chile. *Agri. Expt. Sta., NM State Univ., Las Cruces, NM.* 673.
- FAO. 2005. Major Food and Agricultural Commodities and Producers. <http://www.fao.org/es/ess/top/commodity.html?lang=en&item=687&year=2005>
- Govindarajan, V.S. 1987. CRC critical reviews in food science and nutrition. 24: 245-355.
- Harkay –Vinkler, M. 1974. Storage experiments with raw material of seasoning paprika with particular reference to the red color pigment components. *Acta. Alim. Acad. Sci. hung.* 3: 239 – 249.
- Hoffman, P.G., M.C. Lego and W.G. Galetto. 1983. Separation and quantitation of red pepper major heat principles by reverse – phase HPLC. *J. Agr. Food Chem.* 31: 1326-1330.
- Januluk Khanobdee. 2008. The suitable harvesting period for yield and quality of local pepper varieties in Tak province of Thailand. *The International Conference on Health and the Changing World. Thailand.* 5 p
- Januluk Khanobdee. 2009. The improvement of local pepper cultivars for high capsaicinoids. *International Conference on the Role of Universities in Hands-On Education. Rajamangala University of Technology Lanna.:* 215 – 223.
- Kanner, J. and S. Harel, D. Palevitch, and I. Ben – gera. 1977. Color retention in sweet paprika powder as affected by moisture contents and ripening stage. *J. Food Technol.* 12: 59 – 64.
- Konisho, K.; M. Minami; K. Matsushima and K. Nemoto. 2005. Inter- and intra-specific variation of capsaicinoid concentration in chili pepper (*Capsicum* spp.). Horticultural Research (JAPAN). 4(2):153-158.
- Kumar, B.K., A.D. Munshi, S. Joshi, C. Kaur. 2003. Correlation and path coefficient analysis for yield and biochemical characters in chilli (*Capsicum annuum* L.) *Capsicum and Eggplant Newsletter*, 22 : 67 -70.

- Nancy Ruiz-Lau, Fátima Medina-Lara, Yereni Minero-García, Luis W. Torres-Tapia, Sergio R. Peraza - Sánchez, and Manuel Martínez-Estévez. 2010. Capsaicinoids are absent in habanero pepper vegetative organs (*Capsicum chinense* Jacq.). HortScience 45: 323 – 326
- Prasad, B C N; Shrivastava, Richa; Ravishankar, Gokare A. 2005. Capsaicin : A promising multifaceted drug from *Capsicum* spp. Evidence-Based Integrative Medicine. 2 (3). pp. 147 – 166
- Quagliotti, L. 1971. Effects of soil moisture and nitrogen level on the pungency of berries of *Capsicum annuum* L., Hort. Res.2 93 –97.
- Reeves, M.J. 1987. Re-evaluation of *Capsicum* color data. J. Food Sci. 52 : 1047 – 1049
- Walsh, B. M. and S. B. Hoot. 2001. Phylogenetic relationships of *Capsicum* (Solanaceae) using DNA sequences from two noncoding regions: The chloroplast *atpB-rbcL* spacer region and nuclear *waxy* introns. J Plant Sci. 162(6): 1409–1418.
- Walter H. Greenleaf. 1986. Pepper Breeding. In Mark J.B. 1983. Breeding Vegetable Crops. The AVI Publishing Co, Inc. 67 – 134.

รายละเอียดผลการดำเนินงานของโครงการตามแผนงานโดยสรุป (พอสังเขป)

วัตถุประสงค์	กิจกรรมที่วางแผนไว้	กิจกรรมที่ดำเนินการ	ผลที่ได้รับตลอดโครงการ
1. พัฒนาพันธุ์พริกที่มีผลผลิตและมีปริมาณสารแคปไซซินอยด์สูง ตลอดจนสามารถปรับตัวการผลิตในแหล่งปลูกพริกของประเทศไทย	<p>1.1 -1.3 นำพันธุ์พริกจากโครงการการพัฒนาพันธุ์พริกโดยชุมชนมีส่วนร่วม จำนวน 3 ประชากร ที่ให้ผลผลิตหรือปริมาณสารแคปไซซินอยด์สูง คัดเลือก ณ จ. ลำปาง</p> <p>1.4 ทดสอบพันธุ์พริกที่มีศักยภาพ ณ จ. ลำปาง จ. สุรินทร์ และร่วมกับภาคเอกชน</p> <p>1.5 ขยายเมล็ดพันธุ์หลักในสายพันธุ์ที่ได้รับการคัดเลือก</p> <p>1.6 การขอรับรองพันธุ์</p>	<p>1.1 -1.3 สกัดสายพันธุ์แท้พริกประชากร A และประชากร B ชั่วที่ 1 และชั่วที่ 2 และประชากร C ชั่วที่ 0 ถึง ชั่วที่ 2</p> <p>1.4 ทดสอบพันธุ์พริกที่มีศักยภาพ ณ จ. ลำปาง จ. สุรินทร์ และ ตาก</p> <p>1.5 ขยายเมล็ดพันธุ์หลักในสายพันธุ์ที่ได้รับการคัดเลือก</p> <p>1.6 นำข้อมูลการปรับปรุงพันธุ์และลักษณะประจำพันธุ์ ขอรับรองพันธุ์จากกรมวิชาการเกษตร</p>	<p>1.1 -1.3 ประชากร A ชั่วที่ 2 จำนวน 3 สายพันธุ์ ประชากร B ชั่วที่ 2 จำนวน 5 สายพันธุ์ ประชากร C ชั่วที่ 2 จำนวน 3 สายพันธุ์</p> <p>1.4 ได้ 3 สายพันธุ์</p> <p>1.5 ได้ 30 สายพันธุ์</p> <p>1.6 กำลังดำเนินการ 3 สายพันธุ์ เนื่องจากการเก็บเกี่ยวสิ้นสุดเดือน พฤษภาคม 2553</p>
2. สร้างรูปแบบอาชีพให้แก่เกษตรกรผู้ปลูกพริกในจังหวัดตาก ที่มีมูลค่าผลผลิตเพิ่มขึ้นและสามารถเชื่อมโยงการจัดการตนเองเข้ากับภาคการตลาดได้	<p>2.1 อบรมสาริธการจัดการผลิตเมล็ดพันธุ์พริกที่เหมาะสมให้แก่เกษตรกร ณ จ. ลำปาง</p> <p>2.2 จัดทำแปลงสาธิตการผลิตเมล็ดพันธุ์พริกพันธุ์ผสมปล่อย ณ จ. ตาก</p>	<p>2.1 ถ่ายทอดเทคโนโลยีการผลิตเมล็ดพันธุ์พริกที่เหมาะสมให้แก่เกษตรกร ณ จ. ตาก</p> <p>2.2.1 จัดทำแปลงสาธิตพันธุ์พริกพื้นเมือง โดยร่วมมือประสานระหว่างเกษตรกร ภาครัฐ และเอกชน เพื่อคัดเลือกสายพันธุ์พริกเพื่อการนำไปใช้ประโยชน์ในเชิงพาณิชย์ ในวันที่ 26 พฤศจิกายน พ.ศ. 2552 ณ จ. ลำปาง</p> <p>2.2.2 จัดประชุมโครงการเชิงปฏิบัติการ เรื่อง การมอบพันธุ์พริกพันธุ์ศิริราชบุรี 1 ในวันที่ 28 มกราคม พ.ศ. 2553 ณ ต. ศิริราชบุรี อ. พบพระ จ. ตาก</p>	<p>2.1 จัดแปลงคัดเลือกและทดสอบพันธุ์พริกและสร้างเกษตรกรต้นแบบ ณ ตาก 4 อำเภอ 11 ราย</p> <p>2.2.1 มีผู้ร่วมงาน 90 คน พริก 6 สายพันธุ์ ได้รับการคัดเลือกจากผู้ประเมิน 33 ราย</p> <p>2.2.2 มอบพันธุ์ศิริราชบุรี 1 ให้แก่เกษตรกร 104 ราย</p>

### ข้อคิดเห็นและข้อเสนอแนะอื่น ๆ

เนื่องจากการผลิตพริกพันธุ์พื้นเมืองในสภาพแปลงของเกษตรกร อาศัยฝนตลอดฤดูการผลิต และเป็นพันธุ์ที่มีผลขนาดเล็ก (ความยาวผล 1 – 4 เซนติเมตร) มีอายุเก็บเกี่ยวและช่วงเวลาเก็บเกี่ยวยาวนาน การดำเนินการในสภาพแปลงเกษตรกร ณ จ. ตาก ให้ผลผลิตต่ำ เนื่องจากการปลูกในสภาพธรรมชาติที่อาศัยน้ำจากฝนตลอดฤดูปลูก ทำให้จำนวนครั้งของการเก็บเกี่ยวและผลผลิตต่ำกว่าการปลูกที่มีการเขตรกรรมที่สมบูรณ์ ณ จ. ลำปาง แล. จ. สุรินทร์ นอกจากนี้ พบว่า ต้นทุนค่าแรงงานในการเก็บเกี่ยวสูง เกษตรกรนิยมพันธุ์ที่มีผลขนาดยาวมากกว่าผลสั้น จากการจัดทำแปลงสาธิตพันธุ์พริกพื้นเมือง โดยร่วมมือประสานระหว่างเกษตรกร ภาครัฐ และเอกชน การคัดเลือกสายพันธุ์พริกเพื่อนำไปใช้ประโยชน์ในเชิงพาณิชย์ ณ จ. ลำปาง ได้รับความสนใจจากผู้ใช้ประโยชน์และได้รับการติดต่อให้เผยแพร่พันธุ์อย่างเป็นรูปธรรม ซึ่งมีความจำเป็นต้องขอรับรองพันธุ์และดำเนินการตกลงแบ่งปันผลประโยชน์ที่เหมาะสมต่อไป

ลงนาม ..... (จ. วนิต) ..... (หัวหน้าโครงการวิจัยผู้รับทุน)  
 (นางสาวจันทลักษณ์ ขนบตี)  
 วันที่ 14 ตุลาคม พ.ศ. 2553

Appendix 1 Yield and yield components of the three generations on A population lines selected during 2007 to 2010.

Code	Lines	Yield/rai (t.)												Seed yield/rai (kg.)			
		Fresh						Dry									
		S <sub>0</sub>	S <sub>1</sub>	S <sub>2</sub>	Average	S <sub>0</sub>	S <sub>1</sub>	S <sub>2</sub>	Average	S <sub>0</sub>	S <sub>1</sub>	S <sub>2</sub>	Average	S <sub>0</sub>	S <sub>1</sub>	S <sub>2</sub>	Average
5	T 1 (5) - #	0.4	0.1	-	0.3	0.1	0.0	0.1	10.9	8.9	-	0.1	10.9	8.9	-	9.9	
11	T 1 (11) - #	0.5	0.1	1.3	0.6	0.1	0.0	0.2	24.0	3.8	-	0.2	24.0	3.8	-	13.9	
15	T 1 (15) - #	0.4	0.2	-	0.3	0.1	0.1	0.1	10.9	15.9	-	0.1	10.9	15.9	-	13.4	
26	T 2 (5) - #	0.4	0.1	-	0.3	0.1	0.0	0.1	20.0	8.7	-	0.1	20.0	8.7	-	14.4	
27	T 2 (6) - #	0.7	0.1	0.7	0.5	0.2	0.0	0.2	25.3	5.9	0.2	0.1	25.3	5.9	60.6	30.6	
31	T 2 (10) - #	0.8	0.5	1.3	0.9	0.2	0.1	0.4	46.0	36.2	0.4	0.3	46.0	36.2	49.5	43.9	
50	T 3 (11) - #	0.5	0.7	1.1	0.8	0.1	0.2	0.3	31.0	54.8	0.3	0.2	31.0	54.8	82.7	56.2	
52 self	T 3 (13) - 1 - #	0.4	0.3	0.9	0.5	0.1	0.1	0.3	32.0	24.3	0.3	0.2	32.0	24.3	-	28.1	
55	T 3 (16) - #	0.5	0.2	-	0.3	0.1	0.0	0.1	26.4	15.8	-	0.1	26.4	15.8	-	21.1	
105	S 5 (1) - #	0.5	0.2	-	0.4	0.1	0.1	0.1	23.6	19.3	-	0.1	23.6	19.3	-	21.4	
123	Prik Khe Nu - 1	0.5	0.4	-	0.5	0.2	0.1	0.2	42.9	37.7	-	0.2	42.9	37.7	-	40.3	
126	Supper Hot - 1	0.9	0.1	-	0.5	0.3	0.0	0.2	67.7	16.2	-	0.2	67.7	16.2	-	42.0	
139	Ubol 2006 - 1	1.0	0.1	-	0.6	0.3	0.0	0.2	30.0	12.0	-	0.2	30.0	12.0	-	21.0	
Line average		0.6	0.2	1.0	0.5	0.2	0.1	0.3	30.1	20.0	0.3	0.2	30.1	20.0	64.3	27.4	
Brurapa		-	-	1.9	1.9	-	-	0.6	-	-	0.6	0.6	-	-	58.3	58.3	
Bird pepper		-	-	0.7	0.7	-	-	0.2	-	-	0.2	0.2	-	-	62.9	62.9	
Vieng Ping		-	-	0.6	0.6	-	-	0.2	-	-	0.2	0.2	-	-	27.1	27.1	
Jee Chad : 3 A		-	-	1.3	1.3	-	-	0.4	-	-	0.4	0.4	-	-	-	-	
Check average		-	-	1.1	1.1	-	-	0.4	-	-	0.4	0.4	-	-	49.4	49.4	
All average		0.6	0.2	1.1	0.6	0.2	0.1	0.3	30.1	20.0	0.3	0.2	30.1	20.0	57.9	31.3	
F - test <sup>1/</sup>		0.6	0.2	1.1	0.6	0.2	0.1	0.3	30.1	20.0	0.3	0.2	30.1	20.0	57.9	31.3	
Generations		**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	
Lines		ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	
C.V. (%)		32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	
S <sub>0</sub> - S <sub>2</sub>		0.6	0.2	1.1	0.6	0.2	0.1	0.3	30.1	20.0	0.3	0.2	30.1	20.0	57.9	31.3	

<sup>1/</sup> ns and \*\* = non significant and significant at 1 % level.

<sup>2/</sup> The same letters in the row mean did not significant at the level 5 % by DMRT.



Appendix 1 (cont.)

Lines	Fruits/plant (fruits)												Yield/plant (g.)			
	Fresh						Dry									
	S <sub>0</sub>	S <sub>1</sub>	S <sub>2</sub>	Average	S <sub>0</sub>	S <sub>1</sub>	S <sub>2</sub>	Average	S <sub>0</sub>	S <sub>1</sub>	S <sub>2</sub>	Average	S <sub>0</sub>	S <sub>1</sub>	S <sub>2</sub>	Average
T 1 (5)	395.7	178.4	-	287.0	216.6	72.2	144.4	70.1	19.7	-	-	44.9	-	-	-	-
T 1 (11) - # - #	341.5	52.6	606.5	333.5	249.0	29.4	229.8	66.2	7.5	411.0	126.0	66.6	-	-	-	-
T 1 (15)	377.7	302.4	-	340.0	208.3	121.9	165.1	56.2	34.6	-	-	45.4	-	-	-	-
T 2 (5)	354.8	172.4	-	263.6	206.1	74.7	140.4	60.4	22.5	-	-	41.4	-	-	-	-
T 2 (6) - # - #	726.3	119.0	572.2	472.5	337.0	47.5	218.8	87.7	14.3	272.0	85.2	62.4	-	-	-	-
T 2 (10) - # - #	681.0	417.5	864.2	654.2	409.0	237.0	378.3	114.0	72.5	488.8	151.0	112.5	-	-	-	-
T 3 (11) - # - #	536.0	925.3	996.1	819.1	273.5	333.3	343.4	70.0	102.0	423.3	128.5	100.2	-	-	-	-
T 3 (13) - 1 - #	460.0	454.9	509.0	474.6	210.0	158.7	215.9	73.0	47.0	279.0	91.0	70.3	-	-	-	-
T 3 (16)	391.3	165.3	-	278.3	231.3	76.8	154.0	63.6	24.0	-	-	43.8	-	-	-	-
S 5 ( 1)	160.6	74.2	-	117.4	230.8	120.2	175.5	56.3	34.3	-	-	45.3	-	-	-	-
Prik Khe Nu - 1	222.1	128.2	-	175.2	272.9	178.7	225.8	100.1	54.0	-	-	77.1	-	-	-	-
Supper Hot - 1	383.5	62.2	-	222.9	448.2	69.2	258.7	144.6	20.6	-	-	82.6	-	-	-	-
Ubol 2006 - 1	363.4	53.0	-	208.2	508.8	59.8	284.3	139.0	18.4	-	-	78.7	-	-	-	-
Line average	414.9	238.9	709.6	357.4	292.4	121.5	225.7	84.7	36.3	374.8	116.3	67.0	-	-	-	-
Brurapa	-	-	1,278.9	1,278.9	-	-	667.6	-	-	667.6	219.4	219.4	-	-	-	-
Bird pepper	-	-	223.4	223.4	-	-	313.8	-	-	313.8	92.1	92.1	-	-	-	-
Vieng Ping	-	-	219.6	219.6	-	-	250.9	-	-	250.9	70.2	70.2	-	-	-	-
Jee Chad : 3 A	-	-	723.0	723.0	-	-	394.5	-	-	394.5	120.5	120.5	-	-	-	-
Check average	-	-	611.2	611.2	-	-	406.7	-	-	406.7	125.6	125.6	-	-	-	-
All average	414.9	238.9	670.2	413.8	292.4 a 2/	121.5 b	267.2 a	84.7 ab	36.3 b	387.6 a	120.0 a	80.0	-	-	-	-
F - test																
Generations	ns															
Lines	ns															
C.V. (%)	36.8															

S<sub>0</sub> - S<sub>2</sub> were the origin, first and second generations of the local pepper A population.

<sup>1/</sup> ns and \*\* = non significant and significant at 1 % level.

<sup>2/</sup> The same letters in the row meant did not significant at the level 5 % by DMRT.

## Appendix 1 (cont.)

Lines	Fresh/Dry ratio		Fresh			Dry			Fruit weight (g.)			Fruit size (cm.)*					
			Fresh			Dry			Fruit weight (g.)			Fruit size (cm.)*					
	S <sub>0</sub>	S <sub>1</sub>	S <sub>2</sub>	S <sub>1</sub>	S <sub>2</sub>	S <sub>0</sub>	S <sub>1</sub>	S <sub>2</sub>	S <sub>0</sub>	S <sub>1</sub>	S <sub>2</sub>	S <sub>1</sub>	S <sub>2</sub>	Average			
T 1 (5)	3.1	3.7	-	3.4	0.5	0.2	0.1	-	0.1	-	0.1	0.5	-	0.5	2.6	-	2.6
T 1 (11) - #	3.8	3.9	3.2	3.6	0.7	0.2	0.1	0.2	0.2	a	0.5	0.7	0.6	b	2.0	3.6	2.8
T 1 (15)	3.7	3.5	-	3.6	0.6	0.1	0.1	-	0.1	-	0.1	0.5	-	0.5	2.9	-	2.9
T 2 (5)	3.4	3.3	-	3.4	0.6	0.2	0.1	-	0.2	-	0.2	0.6	-	0.6	3.4	-	3.4
T 2 (6) - #	3.8	3.3	3.0	3.4	0.5	0.4	0.1	0.1	0.1	b	0.5	0.8	0.6	ab	2.8	3.0	2.9
T 2 (10) - #	3.6	3.3	3.2	3.4	0.6	0.6	a	0.2	0.2	a	0.6	0.7	0.7	ab	3.1	3.5	3.3
T 3 (11) - #	3.9	3.3	3.3	3.5	0.5	0.4	b	0.1	0.1	b	0.5	0.6	0.6	b	2.7	3.0	2.9
T 3 (13) - 1	2.9	3.4	3.1	3.1	0.5	0.4	b	0.2	0.1	a	0.6	0.9	0.7	a	3.3	3.0	3.2
T 3 (16)	3.6	3.2	-	3.4	0.6	0.5	0.2	0.1	-	0.2	0.6	-	0.6	-	3.5	-	3.5
AS 5 (1)	4.1	3.5	-	3.8	1.4	1.6	0.4	0.5	-	0.4	1.0	-	1.0	-	5.7	-	5.7
Prik Khe Nu - 1	2.7	3.3	-	3.0	1.2	1.4	0.5	0.4	-	0.4	1.0	-	1.0	-	5.3	-	5.3
Supper Hot - 1	3.1	3.4	-	3.2	1.2	1.1	0.4	0.3	-	0.4	0.7	-	0.7	-	4.5	-	4.5
Ubol 2006 - 1	3.7	3.2	-	3.5	1.4	1.1	0.4	0.3	-	0.4	0.8	-	0.8	-	5.2	-	5.2
Line average	3.5	3.4	3.2	3.4	0.8	0.7	0.2	0.2	0.2	0.2	0.7	0.7	0.7	0.7	3.6	3.2	3.7
Brurapa	-	-	3.2	3.2	-	0.6	-	0.2	0.2	0.2	-	0.7	0.7	-	3.8	3.8	3.8
Bird pepper	-	-	3.3	3.3	-	1.4	-	0.4	0.4	0.4	-	1.1	1.1	-	5.6	5.6	5.6
Vieng Ping	-	-	3.5	3.5	-	1.1	-	0.3	0.3	0.3	-	1.0	1.0	-	3.5	3.5	3.5
Jee Chad : 3 A	-	-	3.3	3.3	-	0.5	-	0.1	0.1	0.1	-	0.8	0.8	-	2.5	2.5	2.5
Check average	-	-	3.3	3.3	-	0.9	-	0.3	0.3	0.3	-	0.9	0.9	-	3.9	3.9	3.9
All average	3.5	3.4	3.2	3.4	0.8	0.7	0.2	0.2	0.2	0.2	0.7	0.7	0.7	0.7	3.6	3.5	3.7
F - test <sup>1/</sup>																	
Lines																	**
Accessions																	**
C.V. (%)																	8.6
																	13.3

S<sub>0</sub> - S<sub>2</sub> were the origin, first and second generations of the local pepper A population.

<sup>1/</sup> ns and \*\* = non significant and significant at 1 % level.

<sup>2/</sup> The same letters in the row mean did not significant at the level 5 % by DMRT.

Appendix 1 (cont.)

Code	Accessions	Harvesting date (days)				Harvesting period (days)				Scoring *							
		S <sub>0</sub>	S <sub>1</sub>	S <sub>2</sub>	Average	S <sub>0</sub>	S <sub>1</sub>	S <sub>2</sub>	Average	S <sub>0</sub>	S <sub>1</sub>	S <sub>2</sub>	Average				
										Mite				Thrips			
		S <sub>0</sub>	S <sub>1</sub>	S <sub>2</sub>	Average	S <sub>0</sub>	S <sub>1</sub>	S <sub>2</sub>	Average	S <sub>0</sub>	S <sub>1</sub>	S <sub>2</sub>	Average	S <sub>0</sub>	S <sub>1</sub>	S <sub>2</sub>	Average
5	T 1 (5)	124.0	121.0	-	122.5	152.0	128.0	-	140.0	4.9	4.9	5.0	4.9	4.4	5.0	-	4.7
11	T 1 (11) - # - #	124.0	121.0	135.0	126.7	106.0	99.0	101.0	102.0	5.0	5.0	5.0	5.0	4.0	5.0	nd	4.5
15	T 1 (15)	120.0	148.0	-	134.0	154.0	101.0	-	127.5	4.5	4.5	5.0	4.7	4.1	5.0	-	4.6
26	T 2 (5)	125.0	121.0	-	123.0	150.0	128.0	-	139.0	4.7	4.7	5.0	4.8	4.4	5.0	-	4.7
27	T 2 (6) - # - #	125.0	132.0	93.3	116.8	150.0	117.0	97.3	121.4	4.6	4.6	5.0	4.8	4.6	5.0	4.5	4.7
31	T 2 (10) - # - #	125.0	121.0	131.5	125.8	105.0	128.0	116.4	116.5	3.5	3.5	5.0	4.3	3.5	5.0	3.2	3.9
50	T 3 (11) - # - #	147.0	132.0	127.0	135.3	128.0	117.0	126.0	123.7	3.7	3.7	5.0	4.3	3.9	5.0	3.8	4.3
52 self	T 3 (13) - 1 - #	149.0	121.0	130.2	133.4	83.0	128.0	43.0	84.7	4.2	4.2	4.4	4.3	4.0	4.1	nd	4.0
55	T 3 (16)	120.0	148.0	-	134.0	154.0	101.0	-	127.5	4.0	4.0	4.6	4.3	3.8	4.8	-	4.3
105	S 5 (1)	120.0	121.0	-	120.5	154.0	128.0	-	141.0	1.5	1.5	4.6	3.1	3.6	4.7	-	4.1
123	Prik Khe Nu - 1	120.0	148.0	-	134.0	154.0	101.0	-	127.5	0.3	0.3	3.5	1.9	1.9	3.8	-	2.8
126	Supper Hot - 1	120.0	121.0	-	120.5	154.0	128.0	-	141.0	1.7	1.7	4.6	3.1	3.4	4.8	-	4.1
139	Ubol 2006 - 1	120.0	121.0	-	120.5	154.0	128.0	-	141.0	2.4	2.4	4.8	3.6	3.2	4.8	-	4.0
	Brurapa	126.1	128.9	123.4	126.7	138.3	117.8	96.7	125.6	3.5	3.5	4.7	4.1	3.8	4.8	3.9	4.2
	Bird pepper	-	-	127.0	127.0	-	-	107.0	107.0	-	-	-	-	-	-	4.3	4.3
	Vieng Ping	-	-	141.8	141.8	-	-	106.5	106.5	-	-	-	-	-	-	3.2	3.2
	Jee Chad : 3 A	-	-	132.0	132.0	-	-	113.5	113.5	-	-	-	-	-	-	2.2	2.2
	Check average	-	-	164.5	164.5	-	-	71.5	71.5	-	-	-	-	-	-	-	-
	All average	126.1	128.9	130.6	129.9	138.3	117.8	97.9	119.8	3.5	3.5	4.7	4.1	3.8	4.8	3.6	3.2
	F - test <sup>1/</sup>															a	3.2
	Lines				ns				ns							b	4.8
	Lines				ns				ns							c	3.2
	C.V. (%)				10.1				20.7							7.1	7.7

S<sub>0</sub> - S<sub>2</sub> were the origin, S<sub>0</sub> - S<sub>2</sub> were the origin, first and second generations of the local pepper A population.

<sup>1/</sup> ns and \*\* = non significant and significant at 1 % level.

<sup>2/</sup> The same letters in the row meaned did not significant at the level 5 % by DMRT.

Appendix 2 Yield and yield components of the origin and first generations of 61 B population accessions selected during 2006 to 2008 and 2008 to 2009 at Lampung province.

Code	Lines	Fresh Yield/rai (t.)			Dry yield/rai (t.)			Seed yield/rai (kg.)		
		S <sub>0</sub>	S <sub>1</sub>	Average	S <sub>0</sub>	S <sub>1</sub>	Average	S <sub>0</sub>	S <sub>1</sub>	Average
1	Phop Phra 1 (1) - #	0.8	0.4	0.6 a-e 2/	0.2	0.1	0.2 a-d	35.4	14.3	24.9
2	Phop Phra 2 (1) - #	1.1	0.3	0.7 a-e	0.3	0.1	0.2 a-d	40.0	6.7	23.4
3	Phop Phra 3 (1) - #	0.6	0.5	0.6 a-e	0.1	0.1	0.1 b-d	9.2	11.8	10.5
4	Phop Phra 3 (2) - #	0.8	0.1	0.5 b-e	0.3	0.0	0.2 a-d	44.7	5.8	25.2
7	Phop Phra 3 (5) - #	0.5	0.1	0.3 b-e	0.2	0.0	0.1 b-d	25.7	2.1	13.9
10	Phop Phra 3 (8) - #	1.2	0.3	0.8 a-d	0.4	0.1	0.2 a-c	62.0	10.3	36.2
11	Phop Phra 3 (9) - #	1.1	0.2	0.7 a-e	0.4	0.1	0.2 a-c	44.0	11.1	27.5
11/2 self	Phop Phra 3 (9) - 2	1.3	0.3	0.8 a-c	0.3	0.1	0.2 a-d	34.0	9.8	21.9
16	Phop Phra 3 (14) - #	0.4	0.5	0.4 b-e	0.1	0.1	0.1 b-d	14.9	6.9	10.9
20	Phop Phra 3 (18) - #	1.1	0.3	0.7 a-e	0.3	0.1	0.2 a-d	66.9	22.4	44.6
21	Phop Phra 3 (19) - #	0.7	0.0	0.3 b-e	0.2	0.0	0.1 b-d	17.6	0.7	9.2
22	Phop Phra 3 (20) - #	1.0	0.2	0.6 a-e	0.3	0.0	0.2 a-d	53.5	9.2	31.3
25	Phop Phra 3 (23) - #	1.2	0.3	0.8 a-d	0.4	0.1	0.2 a-c	24.0	8.3	16.1
26	Phop Phra 3 (24) - #	0.8	0.5	0.6 a-e	0.3	0.1	0.2 a-d	25.0	28.3	26.7
27	Phop Phra 3 (25) - #	1.0	0.2	0.6 a-e	0.2	0.1	0.1 a-d	21.0	12.8	16.9
28	Phop Phra 3 (26) - #	1.5	0.3	0.9 ab	0.5	0.1	0.3 ab	104.0	7.9	56.0
30	Phop Phra 3 (28) - #	0.5	0.1	0.3 b-e	0.2	0.0	0.1 b-d	26.9	2.2	14.5
31	Phop Phra 3 (29) - #	2.2	0.1	1.1 a	0.5	0.0	0.3 a-c	42.0	7.3	24.6
34	Phop Phra 3 (32) - #	1.3	0.3	0.8 a-c	0.4	0.1	0.3 a-c	48.0	15.1	31.6
35	Phop Phra 3 (33) - #	1.3	0.3	0.8 a-c	0.6	0.1	0.3 a	42.5	13.0	27.7
37	Phop Phra 3 (35) - #	0.4	0.1	0.2 b-e	0.1	0.0	0.1 cd	4.8	2.0	3.4
45	Mae Ramad 1 (1) - #	0.4	0.0	0.2 c-e	0.1	0.0	0.1 cd	27.7	2.2	15.0
46	Mae Ramad 1* (1) - #	0.4	0.2	0.3 b-e	0.1	0.1	0.1 b-d	6.5	12.1	9.3
47	Mae Ramad 2 (1) - #	-	0.0	0.0 -	-	0.0	0.0	-	1.6	1.6
50	Mae Ramad 2 (4) - #	0.2	0.1	0.2 c-e	0.1	0.0	0.1 cd	15.5	7.6	11.5
51	Mae Ramad 2 (5) - #	0.6	0.2	0.4 b-e	0.2	0.1	0.1 a-d	48.4	12.7	30.5
53	Mae Ramad 2 (7) - #	0.3	0.2	0.3 b-e	0.1	0.1	0.1 b-d	4.0	3.3	3.7
57	Mae Ramad 2 (11) - #	0.2	0.8	0.5 a-e	0.1	0.3	0.2 a-d	8.0	42.2	25.1
61	Mae Ramad 3 (3) - #	0.1	0.1	0.1 de	0.0	0.0	0.0 d	3.6	2.3	3.0
64	Mae Ramad 3 (6) - #	0.2	0.1	0.2 c-e	0.1	0.0	0.0 cd	19.6	2.3	11.0
70	Mae Ramad 3 (12) - #	0.2	0.4	0.3 b-e	0.1	0.1	0.1 b-d	4.0	20.0	12.0
71 self	Mae Ramad 3 (13) - 1	0.5	0.1	0.3 b-e	0.1	0.0	0.1 cd	38.0	4.1	21.1
74	Mae Sod 1 (1) - #	0.3	0.1	0.2 c-e	0.1	0.0	0.1 cd	10.3	5.1	7.7
75	Mae Sod 1 (2) - #	0.4	0.2	0.3 b-e	0.1	0.0	0.1 cd	5.5	7.9	6.7
77	Mae Sod 1 (4) - #	0.3	0.1	0.2 c-e	0.1	0.0	0.1 cd	10.0	5.1	7.5
81	Mae Sod 1 (8) - #	0.5	0.2	0.3 b-e	0.2	0.1	0.1 a-d	13.6	10.3	11.9
83	Mae Sod 1 (10) - #	0.5	0.3	0.4 b-e	0.2	0.1	0.1 a-d	10.7	28.2	19.5
85	Mae Sod 1 (12) - #	0.3	0.1	0.2 c-e	0.1	0.0	0.1 cd	14.0	5.7	9.9
89	Tha Song Yang 1 (1) - #	0.3	0.1	0.2 c-e	0.1	0.0	0.1 cd	18.8	4.1	11.5
90	Tha Song Yang 1 (2) - #	0.3	0.1	0.2 c-e	0.0	0.0	0.0 d	8.4	3.6	6.0
91	Tha Song Yang 2 (1) - #	0.2	0.1	0.2 c-e	0.1	0.0	0.1 cd	11.5	4.4	7.9
92	Tha Song Yang 3 (1) - #	0.3	0.2	0.2 b-e	0.1	0.0	0.1 cd	17.0	9.9	13.5
93	Umpang 1 (1) - #	0.7	0.1	0.4 b-e	0.2	0.0	0.1 b-d	5.0	4.4	4.7
96	Umpang 2 (3) - #	0.6	0.1	0.4 b-e	0.2	0.0	0.1 b-d	94.3	6.0	50.2
97	Umpang 2 (4) - #	0.4	0.1	0.2 b-e	0.2	0.0	0.1 b-d	19.1	4.3	11.7
99	Umpang 2 (6) - #	0.3	0.0	0.2 c-e	0.1	0.0	0.0 cd	0.4	1.0	0.7
102	Umpang 3 (2) - #	0.7	0.1	0.4 b-e	0.2	0.0	0.1 b-d	7.4	3.6	5.5
103	Umpang 3 (3) - #	0.2	0.1	0.1 c-e	0.0	0.0	0.0 d	3.0	1.8	2.4
104	Umpang 3 (4) - #	0.2	0.0	0.1 de	0.1	0.0	0.0 cd	5.1	1.7	3.4
105	Umpang 3 (5) - #	0.5	0.1	0.3 b-e	0.2	0.0	0.1 b-d	5.1	5.1	5.1
107	Umpang 3 (7) - #	0.5	0.1	0.3 b-e	0.1	0.0	0.1 cd	9.7	4.2	6.9
108	Umpang 3 (8) - #	0.6	0.1	0.4 b-e	0.2	0.0	0.1 b-d	6.7	9.2	7.9
111	Umpang 3 (11) - #	0.3	0.1	0.2 c-e	0.1	0.0	0.1 cd	2.0	3.3	2.7
114	Mae Ramand 5 (1) - #	0.4	0.1	0.3 b-e	0.1	0.0	0.1 cd	5.6	9.4	7.5
115	Mae Ramand 5 (2) - #	0.6	0.1	0.3 b-e	0.2	0.0	0.1 b-d	10.0	5.5	7.8
116	Mae Ramand 5 (3) - #	0.4	0.0	0.2 c-e	0.1	0.0	0.1 cd	3.3	0.8	2.1
118	Mae Ramand 5 (5) - #	0.5	0.0	0.3 b-e	0.2	0.0	0.1 b-d	4.0	1.9	2.9
151	Mae Ramand 6 (9) - #	0.3	0.0	0.2 c-e	0.1	0.0	0.1 cd	0.2	2.9	1.5
158	Mae Ramand 6 (16) - #	0.7	0.1	0.4 b-e	0.2	0.0	0.1 b-d	1.0	4.6	2.8
166	Umphang 4 (4) - #	0.2	0.0	0.1 de	0.1	0.0	0.0 cd	0.9	1.3	1.1
167	Umphang 4 (5) - #	0.2	0.0	0.1 de	0.0	0.0	0.0 d	1.0	0.2	0.6
174	Umphang 4 (12) - #	0.1	0.0	0.1 e	0.0	0.0	0.0 d	1.6	1.1	1.3
188	Umphang 7(bulk) - #	0.2	0.1	0.1 c-e	0.1	0.0	0.0 cd	0.3	4.4	2.3
Lines average		0.6	0.2	0.4 c-e	0.2	0.0	0.1	20.4	7.6	14.0
Brurapa : Lion Brand		0.4	0.0	0.2 c-e	0.1	0.0	0.1 cd	-	1.2	1.2
Bird Pepper: Chai Tai		0.5	0.1	0.3 b-e	0.1	0.0	0.1 cd	-	7.1	7.1
Vieng Ping: Chu Youn Saeg		0.9	0.5	0.7 a-e	0.2	0.1	0.2 a-d	-	24.9	24.9
Check average		0.6	0.2	0.4	0.2	0.0	0.1	-	11.1	11.1
F - test										
Generations				**			**			**
Lines				*			*			ns
C.V. (%)				72.5			77.3			10.6

\* 1 and 2 = the first and second generations.

<sup>1/</sup> ns, \* and \*\* = non significant and significant at 5 % and 1 % level. <sup>2/</sup> The same letters in the column meant did not significant at the level 5 % by DMRT.

Code	Accessions	Fruits/plant (fruit)			Fresh yield/plant (g.)			Dry yield/plant (g.)			
		S <sub>0</sub>	S <sub>1</sub>	Average	S <sub>0</sub>	S <sub>1</sub>	Average	S <sub>0</sub>	S <sub>1</sub>	Average	
1	Phop Phra 1	(1) - #	829.6	430.3	629.9	380.2	198.5	289.4 a-g 2/	117.8	54.1	86.0
2	Phop Phra 2	(1) - #	1,022.5	366.7	694.6	568.5	153.8	361.1 a-g	159.8	44.1	101.9
3	Phop Phra 3	(1) - #	72.6	79.9	76.3	323.8	243.4	283.6 a-g	67.0	48.4	57.7
4	Phop Phra 3	(2) - #	1,034.8	217.0	625.9	414.6	67.8	241.2 b-g	139.7	21.4	80.6
7	Phop Phra 3	(5) - #	759.8	114.1	437.0	260.2	36.6	148.4 b-g	84.5	11.6	48.0
10	Phop Phra 3	(8) - #	895.0	327.9	611.5	615.3	156.2	385.8 a-e	176.7	38.3	107.5
11	Phop Phra 3	(9) - #	1,190.3	271.3	730.8	568.0	105.8	336.9 a-g	178.0	29.5	103.7
11/2 self	Phop Phra 3	(9) - 2	1,212.0	412.6	812.3	654.0	154.0	404.0 a-d	170.0	44.5	107.2
16	Phop Phra 3	(14) - #	297.9	496.8	397.3	193.4	227.3	210.4 b-g	52.6	60.1	56.4
20	Phop Phra 3	(18) - #	863.7	299.6	581.6	553.4	164.5	359.0 a-g	136.4	46.6	91.5
21	Phop Phra 3	(19) - #	903.4	31.6	467.5	330.7	11.2	171.0 b-g	93.6	3.0	48.3
22	Phop Phra 3	(20) - #	931.3	207.6	569.5	478.3	75.3	276.8 a-g	139.4	23.1	81.2
25	Phop Phra 3	(23) - #	1,448.0	576.4	1012.2	616.0	161.3	388.7 a-e	182.0	43.5	112.7
26	Phop Phra 3	(24) - #	812.3	867.5	839.9	390.8	238.4	314.6 a-g	140.4	72.3	106.3
27	Phop Phra 3	(25) - #	1,118.0	233.3	675.6	500.0	106.2	303.1 a-g	98.0	31.3	64.7
28	Phop Phra 3	(26) - #	1,427.0	305.5	866.3	748.0	147.7	447.8 ab	248.0	38.8	143.4
30	Phop Phra 3	(28) - #	695.0	141.0	418.0	227.0	38.3	132.6 b-g	78.3	11.3	44.8
31	Phop Phra 3	(29) - #	1,377.0	200.4	788.7	1088.0	61.6	574.8 a	268.0	14.9	141.4
34	Phop Phra 3	(32) - #	1,324.0	411.9	868.0	641.0	167.1	404.0 a-d	208.0	42.7	125.3
35	Phop Phra 3	(33) - #	1,079.8	324.0	701.9	673.5	157.5	415.5 a-c	289.0	42.9	166.0
37	Phop Phra 3	(35) - #	449.2	87.4	268.3	188.2	36.5	112.3 c-g	66.6	9.8	38.2
45	Mae Ramad 1	(1) - #	525.6	73.0	299.3	195.1	19.6	107.4 c-g	49.4	5.8	27.6
46	Mae Ramad 1*	(1) - #	1,619.0	377.2	998.1	189.0	116.1	152.6 b-g	64.5	34.0	49.2
47	Mae Ramad 2	(1) - #	-	71.4	71.4	-	24.9	24.9	-	9.8	9.8
50	Mae Ramad 2	(4) - #	220.3	211.2	215.7	103.3	63.9	83.6 c-g	43.3	20.1	31.7
51	Mae Ramad 2	(5) - #	679.8	247.6	463.7	314.4	110.8	212.6 b-g	102.6	32.6	67.6
53	Mae Ramad 2	(7) - #	548.3	199.7	374.0	172.3	107.1	139.7 b-g	57.0	27.5	42.3
57	Mae Ramad 2	(11) - #	211.8	969.0	590.4	103.0	392.0	247.5 b-g	40.5	126.0	83.3
61	Mae Ramad 3	(3) - #	263.9	153.6	208.8	74.5	41.8	58.2 e-g	21.6	11.5	16.6
64	Mae Ramad 3	(6) - #	268.7	155.6	212.2	108.5	57.1	82.8 c-g	31.4	14.5	22.9
70	Mae Ramad 3	(12) - #	176.4	521.7	349.0	92.7	177.0	134.9 b-g	28.5	52.4	40.4
71 self	Mae Ramad 3	(13) - 1	381.0	142.6	261.8	246.0	49.3	147.7 b-g	74.0	17.2	45.6
74	Mae Sod 1	(1) - #	380.8	183.5	282.1	173.3	52.6	113.0 c-g	55.9	15.2	35.6
75	Mae Sod 1	(2) - #	324.6	190.3	257.5	186.7	85.2	136.0 b-g	70.5	21.8	46.1
77	Mae Sod 1	(4) - #	366.2	111.0	238.6	164.4	39.1	101.7 c-g	65.9	12.4	39.2
81	Mae Sod 1	(8) - #	449.1	212.1	330.6	247.9	101.4	174.6 b-g	81.8	27.1	54.4
83	Mae Sod 1	(10) - #	433.3	271.5	352.4	234.0	156.2	195.1 b-g	76.7	36.8	56.7
85	Mae Sod 1	(12) - #	407.1	142.6	274.8	148.1	54.2	101.1 c-g	42.3	16.3	29.3
89	Tha Song Yang 1	(1) - #	325.4	81.2	203.3	167.0	36.9	101.9 c-g	50.1	10.6	30.3
90	Tha Song Yang 1	(2) - #	177.1	99.9	138.5	151.6	38.7	95.2 c-g	22.2	12.5	17.4
91	Tha Song Yang 2	(1) - #	222.5	148.6	185.6	119.9	54.8	87.3 c-g	46.4	14.6	30.5
92	Tha Song Yang 3	(1) - #	371.4	210.0	290.7	173.8	76.1	124.9 b-g	49.3	22.0	35.6
93	Umpang 1	(1) - #	1,071.7	91.2	581.4	331.7	28.5	180.1 b-g	109.8	9.3	59.5
96	Umpang 2	(3) - #	575.3	153.7	364.5	315.8	42.0	178.9 b-g	109.4	11.9	60.6
97	Umpang 2	(4) - #	528.9	146.9	337.9	200.3	34.4	117.3 b-g	91.4	11.4	51.4
99	Umpang 2	(6) - #	815.0	55.1	435.1	151.9	10.8	81.4 d-g	31.0	3.3	17.1
102	Umpang 3	(2) - #	1,047.4	151.4	599.4	349.3	32.5	190.9 b-g	96.9	9.4	53.1
103	Umpang 3	(3) - #	276.2	313.6	294.9	78.6	71.0	74.8 d-g	20.3	19.8	20.0
104	Umpang 3	(4) - #	358.9	97.8	228.4	112.2	20.0	66.1 e-g	33.4	6.0	19.7
105	Umpang 3	(5) - #	839.6	132.6	486.1	272.6	40.4	156.5 b-g	81.6	12.8	47.2
107	Umpang 3	(7) - #	764.3	110.1	437.2	241.8	27.1	134.5 b-g	74.2	8.5	41.3
108	Umpang 3	(8) - #	778.5	269.9	524.2	290.0	69.3	179.7 b-g	78.5	20.5	49.5
111	Umpang 3	(11) - #	433.8	116.5	275.1	169.1	37.2	103.2 c-g	55.1	11.3	33.2
114	Mae Ramand 5	(1) - #	675.8	287.2	481.5	211.8	58.9	135.3 b-g	58.7	17.8	38.2
115	Mae Ramand 5	(2) - #	937.0	212.3	574.6	283.7	53.5	168.6 b-g	93.3	14.0	53.7
116	Mae Ramand 5	(3) - #	439.6	39.8	239.7	176.2	8.8	92.5 c-g	52.0	2.4	27.2
118	Mae Ramand 5	(5) - #	705.7	157.5	431.6	230.3	23.4	126.9 b-g	79.7	7.5	43.6
151	Mae Ramand 6	(9) - #	430.2	72.3	251.3	155.2	18.3	86.8 c-g	56.6	5.4	31.0
158	Mae Ramand 6	(16) - #	989.0	233.4	611.2	337.0	47.6	192.3 b-g	104.0	14.4	59.2
166	Umphang 4	(4) - #	360.7	57.5	209.1	113.6	10.0	61.8 e-g	33.2	3.0	18.1
167	Umphang 4	(5) - #	234.9	33.5	134.2	83.3	6.3	44.8 fg	23.3	1.9	12.6
174	Umphang 4	(12) - #	163.7	75.6	119.6	47.9	15.6	31.7 g	13.6	5.0	9.3
188	Umphang 7(bulk)	- #	247.7	136.3	192.0	99.7	35.4	67.6 e-g	32.9	10.8	21.8
Average			657.6	224.1	440.9	290.81	83.4	187.1	88.6	23.5	56.1
Brurapa : Lion Brand			-	24.6	24.6	214.3	7.9	111.1 c-g	-	2.0	2.0
Bird Pepper: Chai Tai			-	39.8	39.8	237.6	32.6	135.1 b-g	-	10.2	10.2
Vieng Ping: Chu Youn Saeg			-	225.4	225.4	469.3	262.9	366.1 a-f	-	62.8	62.8
Average			-	96.6	96.6	-	101.1	101.1	-	25.0	25.0
F - test											
Generations				**		**				**	
Lines				ns		*				ns	
C.V. (%)				60.3		70.8				71.7	

\* 1 and 2 = the first and second generations.

<sup>1/</sup> ns, \* and \*\* = non significant and significant at 5 % and 1 % level.<sup>2/</sup> The same letters in the column meant did not significant at the level 5 % by DMRT.

Code	Accessions		Fresh/Dry ratio			Fresh fruit weight (g.)			Dry fruit weight (g.)		
			S <sub>0</sub>	S <sub>1</sub>	Average	S <sub>0</sub>	S <sub>1</sub>	Average	S <sub>0</sub>	S <sub>1</sub>	Average
1	Phop Phra 1	(1) - #	3.2	3.7	3.5 c-1/2 <sup>1</sup>	0.4	0.5	0.4 cd	0.1	0.1	0.1 cd
2	Phop Phra 2	(1) - #	3.6	3.5	3.5 c-h	0.6	0.4	0.5 cd	0.2	0.1	0.1 cd
3	Phop Phra 3	(1) - #	4.8	5.0	4.9 ab	5.6	3.0	4.3 a	0.9	0.6	0.8 a
4	Phop Phra 3	(2) - #	3.0	3.3	3.1 c-i	0.4	0.3	0.4 cd	0.1	0.1	0.1 cd
7	Phop Phra 3	(5) - #	3.1	3.5	3.3 c-i	0.4	0.3	0.3 cd	0.1	0.1	0.1 cd
10	Phop Phra 3	(8) - #	3.5	3.8	3.6 c-i	0.7	0.4	0.6 cd	0.2	0.1	0.2 cd
11	Phop Phra 3	(9) - #	3.2	3.6	3.4 c-i	0.5	0.4	0.4 cd	0.1	0.1	0.1 cd
11/2 self	Phop Phra 3	(9) - 2	3.8	3.5	3.7 c-h	0.5	0.4	0.5 cd	0.1	0.1	0.1 cd
16	Phop Phra 3	(14) - #	3.7	3.9	3.8 b-h	0.7	0.5	0.6 cd	0.2	0.1	0.1 cd
20	Phop Phra 3	(18) - #	4.1	3.7	3.9 b-g	0.6	0.5	0.6 cd	0.2	0.1	0.2 cd
21	Phop Phra 3	(19) - #	3.5	3.6	3.6 c-h	0.4	0.3	0.4 cd	0.1	0.1	0.1 cd
22	Phop Phra 3	(20) - #	3.4	3.5	3.5 c-i	0.5	0.4	0.4 cd	0.1	0.1	0.1 cd
25	Phop Phra 3	(23) - #	3.4	3.7	3.5 c-h	0.4	0.3	0.3 cd	0.1	0.1	0.1 cd
26	Phop Phra 3	(24) - #	2.8	3.5	3.2 c-i	0.5	0.4	0.5 cd	0.2	0.1	0.1 cd
27	Phop Phra 3	(25) - #	5.1	3.4	4.3 b-d	0.5	0.4	0.5 cd	0.1	0.1	0.1 cd
28	Phop Phra 3	(26) - #	3.0	4.1	3.5 c-h	0.6	0.5	0.5 cd	0.2	0.1	0.1 cd
30	Phop Phra 3	(28) - #	2.9	3.5	3.2 c-i	0.4	0.3	0.4 cd	0.1	0.1	0.1 cd
31	Phop Phra 3	(29) - #	4.1	3.7	3.9 b-g	0.9	0.4	0.6 cd	0.2	0.1	0.2 cd
34	Phop Phra 3	(32) - #	3.1	3.8	3.4 c-i	0.5	0.4	0.4 cd	0.2	0.1	0.1 cd
35	Phop Phra 3	(33) - #	2.3	3.7	3.0 d-i	0.7	0.5	0.6 cd	0.3	0.1	0.2 c
37	Phop Phra 3	(35) - #	2.8	3.7	3.2 c-i	0.6	0.4	0.5 cd	0.1	0.1	0.1 cd
45	Mae Ramad 1	(1) - #	3.9	3.2	3.6 c-h	0.4	0.3	0.4 cd	0.1	0.1	0.1 cd
46	Mae Ramad 1*	(1) - #	2.9	3.3	3.1 c-i	0.4	0.3	0.3 cd	0.0	0.1	0.1 d
47	Mae Ramad 2	(1) - #	-	3.2	3.2	-	0.3	0.3	-	0.1	0.1
50	Mae Ramad 2	(4) - #	2.4	3.2	2.8 f-i	0.5	0.3	0.4 cd	0.2	0.1	0.1 cd
51	Mae Ramad 2	(5) - #	3.1	3.9	3.5 c-i	0.5	0.4	0.4 cd	0.2	0.1	0.1 cd
53	Mae Ramad 2	(7) - #	3.0	4.0	3.5 c-i	0.3	0.5	0.4 cd	0.1	0.1	0.1 cd
57	Mae Ramad 2	(11) - #	2.5	3.1	2.8 f-i	0.7	0.4	0.5 cd	0.2	0.1	0.2 cd
61	Mae Ramad 3	(3) - #	3.4	3.7	3.5 c-h	0.9	0.3	0.6 cd	0.1	0.1	0.1 cd
64	Mae Ramad 3	(6) - #	3.5	4.1	3.8 b-h	0.5	0.3	0.4 cd	0.1	0.1	0.1 cd
70	Mae Ramad 3	(12) - #	3.3	3.4	3.3 c-i	0.6	0.4	0.5 cd	0.2	0.1	0.1 cd
71 self	Mae Ramad 3	(13) - 1	3.3	2.9	3.1 c-i	0.6	0.3	0.5 cd	0.2	0.1	0.2 cd
74	Mae Sod 1	(1) - #	3.1	3.5	3.3 c-i	0.4	0.3	0.3 cd	0.1	0.1	0.1 cd
75	Mae Sod 1	(2) - #	2.7	3.8	3.2 c-i	0.7	0.4	0.5 cd	0.2	0.1	0.2 cd
77	Mae Sod 1	(4) - #	2.5	2.8	2.7 g-i	0.6	0.4	0.5 cd	0.2	0.1	0.2 cd
81	Mae Sod 1	(8) - #	3.0	3.8	3.4 c-i	0.7	0.5	0.6 cd	0.2	0.1	0.2 cd
83	Mae Sod 1	(10) - #	3.1	4.0	3.5 c-h	0.7	0.4	0.5 cd	0.2	0.1	0.1 cd
85	Mae Sod 1	(12) - #	3.5	3.3	3.4 c-i	0.5	0.3	0.4 cd	0.1	0.1	0.1 cd
89	Tha Song Yang 1	(1) - #	3.3	2.4	2.9 f-i	0.7	0.3	0.5 cd	0.2	0.1	0.1 cd
90	Tha Song Yang 1	(2) - #	6.8	4.1	5.5 a	0.8	0.3	0.5 cd	0.1	0.1	0.1 cd
91	Tha Song Yang 2	(1) - #	2.6	3.6	3.1 c-i	0.6	0.4	0.5 cd	0.2	0.1	0.2 cd
92	Tha Song Yang 3	(1) - #	3.5	3.4	3.5 c-i	0.6	0.3	0.5 cd	0.1	0.1	0.1 cd
93	Umpang 1	(1) - #	3.0	3.0	3.0 d-i	0.4	0.2	0.3 d	0.1	0.1	0.1 cd
96	Umpang 2	(3) - #	2.9	3.4	3.1 c-i	0.6	0.3	0.4 cd	0.2	0.1	0.1 cd
97	Umpang 2	(4) - #	2.2	2.9	2.5 hi	0.5	0.2	0.3 cd	0.2	0.1	0.1 cd
99	Umpang 2	(6) - #	4.9	3.7	4.3 bc	0.3	0.2	0.3 d	0.0	0.1	0.0 d
102	Umpang 3	(2) - #	3.6	3.4	3.5 c-i	0.4	0.2	0.3 d	0.1	0.1	0.1 cd
103	Umpang 3	(3) - #	3.9	3.7	3.8 b-h	0.4	0.2	0.3 d	0.1	0.1	0.1 cd
104	Umpang 3	(4) - #	3.4	3.2	3.3 c-i	0.3	0.2	0.3 d	0.1	0.1	0.1 cd
105	Umpang 3	(5) - #	3.3	3.5	3.4 c-i	0.3	0.2	0.3 d	0.1	0.1	0.1 cd
107	Umpang 3	(7) - #	3.3	3.2	3.3 c-i	0.4	0.2	0.3 d	0.1	0.1	0.1 cd
108	Umpang 3	(8) - #	3.7	3.5	3.6 c-i	0.6	0.2	0.4 cd	0.1	0.1	0.1 cd
111	Umpang 3	(11) - #	3.1	2.8	2.9 e-i	0.4	0.2	0.3 d	0.1	0.1	0.1 cd
114	Mae Ramand 5	(1) - #	3.6	3.2	3.4 c-i	0.4	0.2	0.3 d	0.1	0.1	0.1 cd
115	Mae Ramand 5	(2) - #	3.0	3.8	3.4 c-i	0.5	0.3	0.4 cd	0.1	0.1	0.1 cd
116	Mae Ramand 5	(3) - #	3.4	3.4	3.4 c-i	0.5	0.2	0.4 cd	0.1	0.1	0.1 cd
118	Mae Ramand 5	(5) - #	2.9	3.9	3.4 c-i	0.4	0.2	0.3 d	0.1	0.1	0.1 cd
151	Mae Ramand 6	(9) - #	2.7	1.8	2.2 i	0.4	0.1	0.2 d	0.1	0.0	0.1 d
158	Mae Ramand 6	(16) - #	3.2	3.1	3.2 c-i	0.5	0.2	0.3 cd	0.1	0.1	0.1 cd
166	Umphang 4	(4) - #	3.4	1.7	2.5 hi	0.5	0.1	0.3 d	0.1	0.0	0.1 d
167	Umphang 4	(5) - #	3.6	2.9	3.3 c-i	0.4	0.2	0.3 d	0.1	0.1	0.1 cd
174	Umphang 4	(12) - #	3.5	3.2	3.4 c-i	0.4	0.2	0.3 d	0.1	0.1	0.1 cd
188	Umphang 7	- #	3.0	3.6	3.3 c-i	0.6	0.2	0.4 cd	0.1	0.1	0.1 cd
Average			3.3	3.4	3.4	0.6	0.4	0.5	0.1	0.1	0.1
Brurapa : Lion Brand			3.9	4.0	3.9 b-f	0.5	0.3	0.4 cd	0.2	0.1	0.1 cd
Bird Pepper: Chai Tai			3.1	3.2	3.1 c-i	1.0	0.8	0.9 bc	0.4	0.3	0.3 b
Vieng Ping: Chu Youn Saeg			4.1	4.2	4.1 b-e	1.3	1.1	1.2 b	0.4	0.3	0.3 b
Average			-	3.8	3.8	-	0.8	0.8	-	0.2	0.3
F - test											
Generations					ns			**			**
Lines					**			**			**
C.V. (%)					15.0			46.0			34.9

\* 1 and 2 = the first and second generations.

<sup>1</sup> ns, \* and \*\* = non significant and significant at 5 % and 1 % level.

<sup>2</sup> The same letters in the column mean did not significant at the level 5 % by DMRT.

Code	Accessions	Fruit size (cm.)		Harvesting date (days)			Harvesting period (days)			
		Width 1	Length 1	S <sub>0</sub>	S <sub>1</sub>	Average	S <sub>0</sub>	S <sub>1</sub>	Average	
1	Phrob Phra 1	(1) - #	0.7	3.0	117.0	119.5	118.3	180.0	110.3	145.2
2	Phrob Phra 2	(1) - #	0.5	2.4	145.0	122.5	133.8	152.0	86.8	119.4
3	Phrob Phra 3	(1) - #	1.7	6.3	117.0	119.0	118.0	180.0	83.0	131.5
4	Phrob Phra 3	(2) - #	0.5	2.8	145.0	118.0	131.5	152.0	89.6	120.8
7	Phrob Phra 3	(5) - #	0.5	2.6	117.0	132.0	124.5	180.0	71.3	125.7
10	Phrob Phra 3	(8) - #	0.6	3.2	123.0	141.7	132.3	174.0	83.5	128.8
11	Phrob Phra 3	(9) - #	0.5	2.6	145.0	129.0	137.0	152.0	91.2	121.6
11/2 self	Phrob Phra 3	(9) - 2	0.5	3.8	145.0	125.9	135.5	62.0	106.6	84.3
16	Phrob Phra 3	(14) - #	0.6	3.6	127.0	124.8	125.9	169.0	102.2	135.6
20	Phrob Phra 3	(18) - #	0.5	2.6	116.0	127.8	121.9	180.0	92.0	136.0
21	Phrob Phra 3	(19) - #	0.5	2.1	127.0	144.2	135.6	169.0	51.0	110.0
22	Phrob Phra 3	(20) - #	0.6	2.8	122.0	117.5	119.8	174.0	104.1	139.1
25	Phrob Phra 3	(23) - #	0.4	2.1	158.0	137.0	147.5	137.0	58.5	97.8
26	Phrob Phra 3	(24) - #	0.5	2.7	121.0	119.8	120.4	174.0	63.6	118.8
27	Phrob Phra 3	(25) - #	0.6	2.7	121.0	133.0	127.0	174.0	98.4	136.2
28	Phrob Phra 3	(26) - #	0.6	3.3	158.0	121.3	139.7	137.0	96.8	116.9
30	Phrob Phra 3	(28) - #	0.6	2.7	121.0	126.7	123.8	174.0	51.9	112.9
31	Phrob Phra 3	(29) - #	0.7	1.8	158.0	124.0	141.0	137.0	56.0	96.5
34	Phrob Phra 3	(32) - #	0.6	2.6	158.0	116.8	137.4	47.0	98.6	72.8
35	Phrob Phra 3	(33) - #	0.6	2.9	158.0	115.7	136.8	137.0	106.9	122.0
37	Phrob Phra 3	(35) - #	0.5	2.7	125.0	121.6	123.3	137.0	82.6	109.8
45	Mae Ramad 1	(1) - #	0.5	2.0	125.0	126.4	125.7	137.0	81.8	109.4
46	Mae Ramad 1*	(1) - #	0.5	2.1	125.0	122.3	123.6	137.0	91.8	114.4
47	Mae Ramad 2	(1) - #	0.6	2.3	-	156.0	156.0	-	50.8	50.8
50	Mae Ramad 2	(4) - #	0.5	1.9	124.0	124.4	124.2	99.0	84.6	91.8
51	Mae Ramad 2	(5) - #	0.5	2.2	111.0	127.1	119.1	180.0	82.9	131.4
53	Mae Ramad 2	(7) - #	0.6	3.1	130.0	123.3	126.7	137.0	80.0	108.5
57	Mae Ramad 2	(11) - #	0.6	2.2	130.0	143.0	136.5	137.0	100.0	118.5
61	Mae Ramad 3	(3) - #	0.4	1.7	129.0	131.0	130.0	137.0	80.5	108.8
64	Mae Ramad 3	(6) - #	0.5	2.9	129.0	130.0	129.5	137.0	53.8	95.4
70	Mae Ramad 3	(12) - #	0.7	2.8	129.0	119.5	124.3	137.0	113.0	125.0
71 self	Mae Ramad 3	(13) - 1	0.6	2.2	129.0	121.3	125.2	26.0	56.8	41.4
74	Mae Sod 1	(1) - #	0.5	2.1	129.0	136.4	132.7	137.0	53.0	95.0
75	Mae Sod 1	(2) - #	0.5	2.8	129.0	132.3	130.7	137.0	76.9	107.0
77	Mae Sod 1	(4) - #	-	-	129.0	141.0	135.0	137.0	24.3	80.6
81	Mae Sod 1	(8) - #	0.6	2.8	129.0	122.0	125.5	137.0	96.5	116.8
83	Mae Sod 1	(10) - #	0.6	3.0	128.0	142.4	135.2	137.0	64.4	100.7
85	Mae Sod 1	(12) - #	0.6	2.9	128.0	125.3	126.6	137.0	76.9	106.9
89	Tha Song Yang 1	(1) - #	0.7	2.3	128.0	78.0	103.0	137.0	41.2	89.1
90	Tha Song Yang 1	(2) - #	0.6	2.6	128.0	134.1	131.1	137.0	38.7	87.8
91	Tha Song Yang 2	(1) - #	0.6	1.9	128.0	122.7	125.4	137.0	69.9	103.4
92	Tha Song Yang 3	(1) - #	0.6	2.1	128.0	134.3	131.2	137.0	46.9	92.0
93	Umpang 1	(1) - #	0.4	2.2	128.0	141.3	134.7	137.0	27.8	82.4
96	Umpang 2	(3) - #	0.5	2.0	126.0	125.6	125.8	137.0	51.4	94.2
97	Umpang 2	(4) - #	0.5	1.7	126.0	142.0	134.0	137.0	55.2	96.1
99	Umpang 2	(6) - #	0.4	2.1	126.0	147.0	136.5	137.0	25.3	81.1
102	Umpang 3	(2) - #	0.4	1.7	126.0	143.2	134.6	137.0	37.2	87.1
103	Umpang 3	(3) - #	0.5	2.1	126.0	123.3	124.7	137.0	49.7	93.3
104	Umpang 3	(4) - #	0.5	2.3	126.0	142.8	134.4	137.0	42.1	89.5
105	Umpang 3	(5) - #	0.5	2.5	126.0	126.4	126.2	137.0	63.8	100.4
107	Umpang 3	(7) - #	0.5	1.8	126.0	131.9	129.0	137.0	50.4	93.7
108	Umpang 3	(8) - #	0.4	2.0	126.0	133.8	129.9	137.0	57.6	97.3
111	Umpang 3	(11) - #	0.5	2.0	126.0	143.3	134.7	137.0	35.5	86.3
114	Mae Ramand 5	(1) - #	0.5	1.9	126.0	145.8	135.9	137.0	44.2	90.6
115	Mae Ramand 5	(2) - #	0.5	1.8	126.0	134.3	130.1	137.0	63.0	100.0
116	Mae Ramand 5	(3) - #	0.5	1.4	126.0	161.0	143.5	137.0	20.2	78.6
118	Mae Ramand 5	(5) - #	0.5	1.7	126.0	148.8	137.4	137.0	33.6	85.3
151	Mae Ramand 6	(9) - #	-	-	132.0	143.1	137.6	112.0	14.0	63.0
158	Mae Ramand 6	(16) - #	0.5	2.0	130.0	141.5	135.8	115.0	55.8	85.4
166	Umphang 4	(4) - #	0.4	2.2	107.0	85.0	96.0	137.0	18.0	77.5
167	Umphang 4	(5) - #	0.4	1.8	107.0	132.0	119.5	137.0	49.7	93.3
174	Umphang 4	(12) - #	0.4	2.0	107.0	148.3	127.7	137.0	28.1	82.5
188	Umphang 7(bulk)	- #	0.5	2.2	107.0	146.0	126.5	137.0	61.5	99.3
Average			0.5	2.4	128.2	130.4	129.3	139.4	65.6	102.5
Brurapa : Lion Brand			-	-	-	141.0	141.0	-	16.3	16.3
Bird Pepper: Chai Tai			-	-	-	141.0	141.0	-	48.0	48.0
Vieng Ping: Chu Youn Saeg			-	-	-	155.0	155.0	-	24.3	24.3
Average			-	-	-	145.7	145.7	-	29.5	29.5
F - test			-	-	-	-	-	-	-	-
Generations			-	-	-	-	ns	-	-	**
Lines			-	-	-	-	ns	-	-	ns
C.V. (%)			-	-	-	-	10.0	-	-	24.6

\* 1 and 2 = the first and second generations.

<sup>1</sup> ns, \* and \*\* = non significant and significant at 5 % and 1 % level.<sup>2</sup> The same letters in the column meant did not significant at the level 5 % by DMRT.

Code	Accessions	Scoring *						
		Mite 1	Mite 2	Average	Thrip 1	Thrip 2	Average	
1	Phrob Phra 1	(1) - #	4.1	4.5	4.3 a-l 2/	3.7	4.5	4.1 a-f
2	Phrob Phra 2	(1) - #	4.3	5.0	4.6 a-d	4.3	4.8	4.6 a-c
3	Phrob Phra 3	(1) - #	4.5	4.9	4.7 a-c	4.5	5.0	4.7 ab
4	Phrob Phra 3	(2) - #	4.2	4.8	4.5 a-f	4.3	4.5	4.4 a-d
7	Phrob Phra 3	(5) - #	3.2	3.9	3.5 g-i	2.9	3.8	3.3 b-h
10	Phrob Phra 3	(8) - #	4.0	4.6	4.3 a-i	3.9	4.6	4.2 a-e
11	Phrob Phra 3	(9) - #	4.3	4.8	4.5 a-e	3.6	4.6	4.1 a-f
11/2 self	Phrob Phra 3	(9) - 2	4.2	4.7	4.4 a-g	3.6	4.4	4.0 a-f
16	Phrob Phra 3	(14) - #	3.9	4.3	4.1 a-i	3.3	3.8	3.6 a-h
20	Phrob Phra 3	(18) - #	4.0	4.9	4.4 a-g	3.6	4.9	4.3 a-e
21	Phrob Phra 3	(19) - #	2.9	4.3	3.6 f-i	2.7	4.3	3.5 a-h
22	Phrob Phra 3	(20) - #	3.3	4.5	3.9 c-i	3.2	4.5	3.9 a-g
25	Phrob Phra 3	(23) - #	3.7	5.0	4.4 a-h	3.8	5.0	4.4 a-d
26	Phrob Phra 3	(24) - #	4.2	4.9	4.5 a-e	4.0	4.4	4.2 a-e
27	Phrob Phra 3	(25) - #	4.3	4.7	4.5 a-f	4.3	4.4	4.3 a-e
28	Phrob Phra 3	(26) - #	3.3	4.0	3.6 e-i	2.7	4.2	3.5 b-h
30	Phrob Phra 3	(28) - #	2.9	4.1	3.5 h-i	2.0	4.2	3.1 c-h
31	Phrob Phra 3	(29) - #	3.0	4.8	3.9 c-i	2.6	4.7	3.6 a-h
34	Phrob Phra 3	(32) - #	4.1	4.8	4.5 a-g	4.0	4.6	4.3 a-e
35	Phrob Phra 3	(33) - #	4.1	4.9	4.5 a-f	3.8	4.3	4.1 a-f
37	Phrob Phra 3	(35) - #	3.5	4.7	4.1 a-i	3.1	4.5	3.8 a-g
45	Mae Ramad 1	(1) - #	1.9	3.4	2.7 j	1.8	3.1	2.4 gh
46	Mae Ramad 1*	(1) - #	3.8	4.7	4.3 a-i	3.2	4.3	3.7 a-g
47	Mae Ramad 2	(1) - #	3.8	4.6	4.2	3.1	4.0	3.6
50	Mae Ramad 2	(4) - #	4.6	4.9	4.7 a-c	4.1	4.6	4.3 a-e
51	Mae Ramad 2	(5) - #	3.9	4.4	4.1 a-i	2.9	4.2	3.5 a-h
53	Mae Ramad 2	(7) - #	4.0	4.8	4.4 a-h	3.0	4.1	3.6 a-h
57	Mae Ramad 2	(11) - #	5.0	5.0	5.0 a	5.0	5.0	5.0 a
61	Mae Ramad 3	(3) - #	4.2	5.0	4.6 a-d	3.8	4.7	4.2 a-e
64	Mae Ramad 3	(6) - #	3.7	4.8	4.2 a-i	1.2	4.6	2.9 d-h
70	Mae Ramad 3	(12) - #	3.0	4.5	3.8 d-i	2.8	4.3	3.5 a-h
71 self	Mae Ramad 3	(13) - 1	4.0	5.0	4.5 a-f	3.9	4.7	4.3 a-e
74	Mae Sod 1	(1) - #	2.5	4.3	3.4 i	1.7	4.1	2.9 d-h
75	Mae Sod 1	(2) - #	3.9	4.7	4.3 a-i	2.8	4.4	3.6 a-h
77	Mae Sod 1	(4) - #	3.4	5.0	4.2 a-i	0.5	4.8	2.6 f-h
81	Mae Sod 1	(8) - #	3.5	4.7	4.1 a-i	3.1	4.4	3.8 a-g
83	Mae Sod 1	(10) - #	3.1	4.0	3.6 g-i	2.6	3.8	3.2 c-h
85	Mae Sod 1	(12) - #	4.1	5.0	4.6 a-e	3.3	4.9	4.1 a-f
89	Tha Song Yang 1	(1) - #	3.9	4.8	4.4 a-h	2.8	4.5	3.6 a-h
90	Tha Song Yang 1	(2) - #	3.9	4.9	4.4 a-h	3.2	4.4	3.8 a-g
91	Tha Song Yang 2	(1) - #	4.3	4.8	4.5 a-e	4.1	4.5	4.3 a-e
92	Tha Song Yang 3	(1) - #	3.2	4.5	3.8 c-i	2.2	4.3	3.2 b-h
93	Umpang 1	(1) - #	3.7	4.7	4.2 a-i	2.7	4.4	3.6 a-h
96	Umpang 2	(3) - #	4.4	4.9	4.7 a-d	3.5	4.7	4.1 a-f
97	Umpang 2	(4) - #	4.1	4.4	4.2 a-i	2.8	4.1	3.5 b-h
99	Umpang 2	(6) - #	3.6	4.7	4.1 a-i	2.8	4.7	3.7 a-g
102	Umpang 3	(2) - #	3.8	4.7	4.3 a-i	3.4	4.4	3.9 a-g
103	Umpang 3	(3) - #	3.3	5.0	4.1 a-i	2.7	4.9	3.8 a-g
104	Umpang 3	(4) - #	3.5	4.8	4.2 a-i	2.2	4.5	3.4 b-h
105	Umpang 3	(5) - #	3.2	4.9	4.1 b-i	2.5	4.4	3.4 b-h
107	Umpang 3	(7) - #	4.0	4.6	4.3 a-i	2.8	4.5	3.6 a-h
108	Umpang 3	(8) - #	3.6	4.8	4.2 a-i	2.5	4.5	3.5 a-h
111	Umpang 3	(11) - #	4.1	4.9	4.5 a-f	3.5	4.8	4.1 a-f
114	Mae Ramand 5	(1) - #	4.1	4.9	4.5 a-f	3.0	4.6	3.8 a-g
115	Mae Ramand 5	(2) - #	4.0	4.8	4.4 a-h	3.5	4.5	4.0 a-f
116	Mae Ramand 5	(3) - #	3.8	4.9	4.4 a-h	1.8	4.8	3.3 b-h
118	Mae Ramand 5	(5) - #	3.6	4.6	4.1 a-i	1.9	4.5	3.2 c-h
151	Mae Ramand 6	(9) - #	3.8	4.3	4.1 b-i	2.9	4.3	3.6 a-h
158	Mae Ramand 6	(16) - #	3.7	4.2	3.9 c-i	3.6	3.7	3.7 a-h
166	Umphang 4	(4) - #	4.2	4.8	4.5 a-f	2.0	4.3	3.1 c-h
167	Umphang 4	(5) - #	4.8	5.0	4.9 ab	4.7	4.8	4.8 ab
174	Umphang 4	(12) - #	3.0	4.7	3.9 c-i	3.8	4.7	4.3 a-e
188	Umphang 7 (bulk)	- #	3.9	4.5	4.2 a-i	3.5	4.4	4.0 a-g
Average			3.8	4.7	4.2	3.1	4.4	3.8
Brurapa : Lion Brand			3.1	5.0	4.1 b-i	0.8	4.9	2.8 e-h
Bird Pepper: Chai Tai			0.7	3.9	2.3 j	2.2	4.1	3.1 c-h
Vieng Ping: Chu Youn Saeg			3.3	3.7	3.5 hi	1.4	3.0	2.2 h
Average			2.4	4.2	3.3	1.5	4.0	2.7
F - test								
Generations					**			**
Lines					**			*
C.V. (%)					8.8			16.5

\* 1 and 2 = the first and second generations.

<sup>1</sup> ns, \* and \*\* = non significant and significant at 5% and 1% level.<sup>2</sup> The same letters in the column meant did not significant at the level 5% by DMRT.

Appendix 3 The yield and yield components of the 3 generations of the B population lines selected during 2006 to 2009 at Lamphang province.

Code	Lines	Fresh Yield/rai (t.)				Dry yield/rai (t.)				Seed yield/rai (kg.)							
		S <sub>0</sub>	S <sub>1</sub>	S <sub>2</sub>	Average	S <sub>0</sub>	S <sub>1</sub>	S <sub>2</sub>	Average	S <sub>0</sub>	S <sub>1</sub>	S <sub>2</sub>	Average				
1	Phop Phra 1 ( 1 )	- # - #	0.8	0.4	0.1	0.4	0.2	0.1	0.1	0.0	0.1	0.0	0.1	35.4	14.3	2.7	17.5
2	Phop Phra 2 ( 1 )	- # - #	1.1	0.3	0.3	0.6	0.3	0.1	0.1	0.1	0.1	0.0	0.2	40.0	6.7	11.8	19.5
10	Phop Phra 3 ( 8 )	- # - #	1.2	0.3	0.1	0.5	0.4	0.1	0.1	0.0	0.0	0.0	0.2	62.0	10.3	3.0	25.1
11/2	self	- 1 - #	1.3	0.3	0.1	0.6	0.3	0.1	0.1	0.0	0.0	0.0	0.2	34.0	9.8	5.9	16.6
16	Phop Phra 3 ( 14 )	- # - #	0.4	0.5	0.4	0.4	0.1	0.1	0.1	0.1	0.1	0.1	0.1	14.9	6.9	13.9	11.9
57	Mae Ramad 2 ( 11 )	- # - #	0.2	0.8	0.1	0.3	0.1	0.1	0.3	0.0	0.0	0.0	0.1	8.0	42.2	1.0	17.1
61	Mae Ramad 3 ( 3 )	- # - #	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6	2.3	2.4	2.8
64	Mae Ramad 3 ( 6 )	- # - #	0.2	0.1	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	19.6	2.3	1.1	7.7
74	Mae Sod 1 ( 1 ) <sup>1</sup>	- # - #	0.3	0.1	0.0	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.1	10.3	5.1	0.0	5.2
75	Mae Sod 1 ( 2 )	- # - #	0.4	0.2	0.1	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.1	5.5	7.9	4.2	5.9
90	Tha Song Yang 1 ( 2 )	- # - #	0.3	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.4	3.6	0.5	4.1
91	Tha Song Yang 2 ( 1 )	- # - #	0.2	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	11.5	4.4	1.6	5.8
92	Tha Song Yang 3 ( 1 )	- # - #	0.3	0.2	0.1	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.1	17.0	9.9	4.1	10.4
Line average			0.5	0.3	0.1	0.3	0.2	0.1	0.1	0.0	0.0	0.0	0.1	20.8	9.7	4.0	11.5
Brurapa : Lion Brand			-	0.0	0.3	0.2	-	0.0	0.0	0.1	0.0	0.0	0.0	-	1.2	14.5	7.8
Bird Pepper: Chai Tai			-	0.1	0.5	0.3	-	0.0	0.0	0.1	0.1	0.1	0.1	-	7.1	26.3	16.7
Vieng Ping: Chu Youn Saeg			-	0.5	0.1	0.3	-	0.1	0.1	0.0	0.0	0.0	0.1	-	24.9	5.2	15.0
Check average			-	0.2	0.3	0.3	-	0.0	0.0	0.1	0.1	0.1	0.1	-	11.1	15.3	13.2
All average			0.5 a <sup>2/</sup>	0.2 b	0.1 b	0.3	0.2 a	0.1 b	0.1 b	0.0 b	0.0 b	0.1	0.1	20.8 a	9.9 b	6.1 b	11.8
F-test																	
Generations					**												**
Lines/Checks					ns												ns
C.V. (%)					78.8									97.3			89.2

<sup>1/</sup> ns and \*\* = non significant and significant at 1 % level.

<sup>2/</sup> The same letters in the column mean did not significant at the level 5 % by DMRT.

Code	Lines	Fruits/plant (fruit)				Fresh yield/plant (g.)				Dry yield/plant (g.)			
		S <sub>0</sub>	S <sub>1</sub>	S <sub>2</sub>	Average	S <sub>0</sub>	S <sub>1</sub>	S <sub>2</sub>	Average	S <sub>0</sub>	S <sub>1</sub>	S <sub>2</sub>	Average
1	Phrob Phra 1 (1)	- # - #	829.6	430.3	124.3	461.4	380.2	198.5	209.6	117.8	54.1	13.3	61.7
2	Phrob Phra 2 (1)	- # - #	1,022.5	366.7	311.9	567.0	568.5	153.8	286.7	159.8	44.1	39.9	81.2
10	Phrob Phra 3 (8)	- # - #	895.0	327.9	100.1	441.0	615.3	156.2	270.9	176.7	38.3	11.5	75.5
11/2	self Phrob Phra 3 (9)	- 1 - #	1,212.0	412.6	233.7	619.4	654.0	154.0	293.3	170.0	44.5	22.6	79.0
16	Phrob Phra 3 (14)	- # - #	297.9	496.8	427.6	407.4	193.4	227.3	200.5	52.6	60.1	53.5	55.4
57	Mae Ramad 2 (11)	- # - #	211.8	969.0	60.1	413.6	103.0	392.0	174.3	40.5	126.0	7.5	58.0
61	Mae Ramad 3 (3)	- # - #	263.9	153.6	146.2	187.9	74.5	41.8	50.3	21.6	11.5	16.1	16.4
64	Mae Ramad 3 (6)	- # - #	268.7	155.6	45.6	156.7	108.5	57.1	59.4	31.4	14.5	2.9	16.3
74	Mae Sod 1 (1)	- # - #	380.8	183.5	64.4	209.5	173.3	52.6	83.5	55.9	15.2	7.1	26.1
75	Mae Sod 1 (2)	- # - #	324.6	190.3	108.4	207.8	186.7	85.2	108.6	70.5	21.8	16.9	36.4
90	Tha Song Yang 1 (2)	- # - #	177.1	99.9	8.1	95.0	151.6	38.7	64.2	22.2	12.5	0.8	11.8
91	Tha Song Yang 2 (1)	- # - #	222.5	148.6	54.8	142.0	119.9	54.8	66.0	46.4	14.6	6.0	22.3
92	Tha Song Yang 3 (1)	- # - #	371.4	210.0	69.2	216.9	173.8	76.1	95.4	49.3	22.0	9.5	26.9
Accession average			498.3	318.8	135.0	317.4	269.5	129.9	151.0	78.0	36.9	16.0	43.6
Brurapa : Lion Brand			-	24.6	319.3	172.0	-	7.9	83.1	-	2.0	47.0	24.5
Bird Pepper: Chai Tai			-	39.8	188.5	114.2	-	32.6	137.3	-	10.2	65.8	38.0
Vieng Ping: Chu Youn Saeg			-	225.4	58.3	141.8	-	262.9	166.7	-	62.8	16.4	39.6
Check average			-	96.6	188.7	142.7	-	101.1	129.0	-	25.0	43.1	34.0
All average			498.3 a <sup>2/</sup>	277.2 b	145.0 b	284.6	269.5 a	124.5 b	146.9	78.0 a	34.6 b	21.1 b	41.8
F-test													
Generations					**				**				**
Accessions/Checks					ns				ns				ns
C.V. (%)					71.7				76.9				76.0

<sup>1/</sup> ns and \*\* = non significant and significant at 1 % level.

<sup>2/</sup> The same letters in the column mean did not significant at the level 5 % by DMRT.

Code	Lines	Fresh/Dry ratio				Fresh fruit weight (g.)				Dry fruit weight (g.)				
		S <sub>0</sub>	S <sub>1</sub>	S <sub>2</sub>	Average	S <sub>0</sub>	S <sub>1</sub>	S <sub>2</sub>	Average	S <sub>0</sub>	S <sub>1</sub>	S <sub>2</sub>	Average	
1	Phrob Phra 1 ( 1 )	- # - #	3.2	3.7	3.1	3.3	0.4	0.5	0.3	0.4 b	0.1	0.1	0.1	0.1 c
2	Phrob Phra 2 ( 1 )	- # - #	3.6	3.5	3.4	3.5	0.6	0.4	0.4	0.5 b	0.2	0.1	0.1	0.1 bc
10	Phrob Phra 3 ( 8 )	- # - #	3.5	3.8	3.6	3.6	0.7	0.4	0.4	0.5 b	0.2	0.1	0.1	0.1 bc
11/2 self	Phrob Phra 3 ( 9 )	- 1 - #	3.8	3.5	3.6	3.6	0.5	0.4	0.3	0.4 b	0.1	0.1	0.1	0.1 c
16	Phrob Phra 3 ( 14 )	- # - #	3.7	3.9	3.3	3.6	0.7	0.5	0.4	0.5 b	0.2	0.1	0.1	0.1 bc
57	Mae Ramad 2 ( 11 )	- # - #	2.5	3.1	3.1	2.9	0.7	0.4	0.4	0.5 b	0.2	0.1	0.1	0.1 bc
61	Mae Ramad 3 ( 3 )	- # - #	3.4	3.7	2.9	3.3	0.9	0.3	0.3	0.5 b	0.1	0.1	0.1	0.1 c
64	Mae Ramad 3 ( 6 )	- # - #	3.5	4.1	4.4	4.0	0.5	0.3	0.4	0.4 b	0.1	0.1	0.1	0.1 c
74	Mae Sod 1 ( 1 )	- # - #	3.1	3.5	3.7	3.4	0.4	0.3	0.2	0.3 b	0.1	0.1	0.1	0.1 c
75	Mae Sod 1 ( 2 )	- # - #	2.7	3.8	3.1	3.2	0.7	0.4	0.5	0.5 b	0.2	0.1	0.2	0.2 b
90	Tha Song Yang 1 ( 2 )	- # - #	6.8	4.1	2.8	4.6	0.8	0.3	0.3	0.5 b	0.1	0.1	0.1	0.1 c
91	Tha Song Yang 2 ( 1 )	- # - #	2.6	3.6	3.8	3.3	0.6	0.4	0.4	0.5 b	0.2	0.1	0.1	0.1 bc
92	Tha Song Yang 3 ( 1 )	- # - #	3.5	3.4	4.4	3.8	0.6	0.3	0.4	0.4 b	0.1	0.1	0.1	0.1 c
	Accession average		3.5	3.7	3.5	3.6	0.6	0.4	0.4	0.5	0.2	0.1	0.1	0.1
	Brurapa : Lion Brand		-	4.0	3.5	3.7	-	0.3	0.5	0.4 b	-	0.1	0.1	0.1 bc
	Bird Pepper: Chai Tai		-	3.2	3.8	3.5	-	0.8	1.4	1.1 a	-	0.3	0.4	0.3 a
	Vieng Ping: Chu Youn Saeg		-	4.2	4.2	4.2	-	1.1	1.1	1.1 a	-	0.3	0.3	0.3 a
	Check average		-	3.8	3.8	3.8	-	0.8	1.0	0.9	-	0.2	0.3	0.2
	All average		3.5	3.7	3.5	3.6	0.6 a <sup>2/</sup>	0.4 b	0.5 b	0.5	0.2 a	0.1 b	0.1 b	0.1
	F-test													
	Generations				ns					**				**
	Accessions/Checks				ns					**				**
	C.V. (%)				17.7					22.1				21.3

<sup>1/</sup> ns and \*\* = non significant and significant at 1 % level.

<sup>2/</sup> The same letters in the column mean did not significant at the level 5 % by DMRT.

Code	Lines	Fruit size (cm.)			Harvesting date (days)			Harvesting period (days)								
		Length 2	Length 3	Average	Width 2	Width 3	Average	S <sub>0</sub>	S <sub>1</sub>	S <sub>2</sub>	Average	S <sub>0</sub>	S <sub>1</sub>	S <sub>2</sub>	Average	
1	Phrob Phra 1 (1)	- # - #	3.0	3.1	3.1 b-e <sup>2/</sup>	0.7	0.4	0.5 bc	117.0	119.5	1154.5	130.3	180.0	110.3	27.0	105.8
2	Phrob Phra 2 (1)	- # - #	2.4	3.6	3.0 b-e	0.5	0.5	0.5 bc	145.0	122.5	151.0	139.5	152.0	86.8	29.5	89.4
10	Phrob Phra 3 (8)	- # - #	3.2	3.2	3.2 b-e	0.6	0.5	0.5 bc	123.0	141.7	131.1	131.9	174.0	83.5	34.1	97.2
11/2	self Phrob Phra 3 (9)	- 1 - #	3.8	3.3	3.5 bc	0.5	0.4	0.5 c	145.0	125.9	149.7	140.2	62.0	106.6	25.8	64.8
16	Phrob Phra 3 (14)	- # - #	3.6	3.9	3.8 b	0.6	0.5	0.6 bc	127.0	124.8	131.6	127.8	169.0	102.2	47.0	106.1
57	Mae Ramad 2 (11)	- # - #	2.2	3.2	2.7 c-e	0.6	0.6	0.6 bc	130.0	143.0	149.7	140.9	137.0	100.0	20.7	85.9
61	Mae Ramad 3 (3)	- # - #	1.7	2.8	2.3 e	0.4	0.6	0.5 bc	129.0	131.0	150.0	136.7	137.0	80.5	23.0	80.2
64	Mae Ramad 3 (6)	- # - #	2.9	3.4	3.2 b-e	0.5	0.5	0.5 bc	129.0	130.0	152.4	137.1	137.0	53.8	4.4	65.1
74	Mae Sod 1 (1)	- # - #	2.1	3.9	3.0 b-e	0.5	0.4	0.5 c	129.0	136.4	158.5	141.3	137.0	53.0	16.8	68.9
75	Mae Sod 1 (2)	- # - #	2.8	3.4	3.1 b-e	0.5	0.4	0.5 c	129.0	132.3	148.8	136.7	137.0	76.9	27.0	80.3
90	Tha Song Yang 1 (2)	- # - #	2.6	3.0	2.8 b-e	0.6	0.5	0.5 bc	128.0	134.1	138.3	133.5	137.0	38.7	8.8	61.5
91	Tha Song Yang 2 (1)	- # - #	1.9	3.1	2.5 de	0.6	0.4	0.5 bc	128.0	122.7	137.5	129.4	137.0	69.9	26.5	77.8
92	Tha Song Yang 3 (1)	- # - #	2.1	3.2	2.6 c-e	0.6	0.7	0.7 b	128.0	134.3	150.5	137.6	137.0	46.9	6.4	63.4
	Accession average		2.7	3.3	3.0	0.6	0.5	0.5	129.8	130.6	146.4	135.6	141.0	77.6	22.8	80.5
	Brurapa : Lion Brand		-	3.7	3.7 b-d	-	0.5	0.5 bc	-	141.0	133.1	137.0	-	16.3	42.3	29.3
	Bird Pepper: Chai Tai		-	5.0	5.0 a	-	0.6	0.6 bc	-	141.0	121.8	131.4	-	48.0	64.3	56.1
	Vieng Ping: Chu Youn Saeg		-	4.1	4.1 b	-	1.2	1.2 a	-	155.0	154.5	154.8	-	24.3	17.0	20.6
	Check average		-	4.2	4.2	-	0.8	0.8	-	145.7	136.4	141.1	-	29.5	41.2	35.3
	All average		2.7 a	3.5 b	3.2	0.6	0.5	0.6	129.8 b	133.5 b	144.6 a	136.6	141.0 a	68.6 b	26.3 c	72.0
	F-test															
	Generations				**		ns				**					**
	Accessions/Checks				**		**				ns					ns
	C.V. (%)				12.6		14.0				6.5					28.9

<sup>1/</sup> ns and \*\* = non significant and significant at 1 % level.

<sup>2/</sup> The same letters in the column mean did not significant at the level 5 % by DMRT.

## Appendix 3 (cont.)

Code	Lines	Scoring												
		Mite 21	Mite 31	Average	Mite 22	Mite 32	Average	Thrip 21	Thrip 31	Average	Thrip 22	Thrip 32	Average	
1	Phrob Phra 1 ( 1 )	- # - #	4.1	0.4	2.3	4.5	3.7	4.1 ab	3.7	0.3	2.0	4.5	2.8	3.7
2	Phrob Phra 2 ( 1 )	- # - #	4.3	1.0	2.6	5.0	2.9	3.9 ab	4.3	0.3	2.3	4.8	2.5	3.6
10	Phrob Phra 3 ( 8 )	- # - #	4.0	0.6	2.3	4.6	4.2	4.4 a	3.9	0.8	2.4	4.6	4.0	4.3
11/2	self	- 1 - #	4.2	0.3	2.2	4.7	3.1	3.9 ab	3.6	0.9	2.3	4.4	2.9	3.6
16	Phrob Phra 3 ( 14 )	- # - #	3.9	0.5	2.2	4.3	2.7	3.5 a-c	3.3	2.1	2.7	3.8	2.5	3.2
57	Mae Ramad 2 ( 11 )	- # - #	5.0	0.1	2.6	5.0	4.5	4.8 a	5.0	0.9	2.9	5.0	4.0	4.5
61	Mae Ramad 3 ( 3 )	- # - #	4.2	0.1	2.1	5.0	4.6	4.8 a	3.8	0.3	2.0	4.7	4.4	4.5
64	Mae Ramad 3 ( 6 )	- # - #	3.7	0.1	1.9	4.8	4.8	4.8 a	1.2	0.4	0.8	4.6	4.8	4.7
74	Mae Sod 1 ( 1 )	- # - #	2.5	0.5	1.5	4.3	4.5	4.4 a	1.7	2.1	1.9	4.1	4.1	4.1
75	Mae Sod 1 ( 2 )	- # - #	3.9	0.0	2.0	4.7	3.8	4.3 a	2.8	0.2	1.5	4.4	3.7	4.0
90	Tha Song Yang 1 ( 2 )	- # - #	3.9	0.7	2.3	4.9	4.3	4.6 a	3.2	1.4	2.3	4.4	4.2	4.3
91	Tha Song Yang 2 ( 1 )	- # - #	4.3	1.8	3.0	4.8	3.8	4.3 a	4.1	2.2	3.1	4.5	3.7	4.1
92	Tha Song Yang 3 ( 1 )	- # - #	3.2	0.9	2.0	4.5	4.0	4.2 a	2.2	0.9	1.5	4.3	3.6	4.0
	Accession average		3.9	0.5	2.2	4.7	3.9	4.3	3.3	1.0	2.1	4.5	3.6	4.1
	Brurapa : Lion Brand		3.1	0.2	1.7	5.0	3.7	4.3 a	0.8	0.7	0.7	4.9	3.5	4.2
	Bird Pepper: Chai Tai		0.7	0.0	0.4	3.9	1.1	2.5 c	2.2	0.9	1.6	4.1	0.7	2.4
	Vieng Ping: Chu Youn Saeg		3.3	0.7	2.0	3.7	2.0	2.8 bc	1.4	1.8	1.6	3.0	2.0	2.5
	Check average		2.4	0.3	1.3	4.2	2.3	3.2	1.5	1.2	1.3	4.0	2.1	3.0
	All average		3.6	0.5	2.1	4.6	3.6	4.1	3.0	1.0	2.0	4.4	3.3	3.9
	F-test													
	Generations				**		**	**		**	**			**
	Accessions/Checks				ns		*	*		ns	ns			ns
	C.V. (%)				33.7		13.8	13.8		52.8	52.8			16.6

<sup>1/</sup> ns, \* and \*\* = non significant and significant at 5 % and 1 % level.

<sup>2/</sup> The same letters in the column mean did not significant at the level 5 % by DMRT.

Appendix 4 Yield and yield components on S<sub>2</sub> of 5 pepper B lines selected during April 2009 to April 2010 at Lampang province .

Code Lines	Fresh yield/rai (t.)			Dry yield/rai (t.)			Seed yield/rai (kg.)			Fruits/plant (fruits)								
	1*	2*	3*	Average	1	2	3	Average	1	2	3	Average						
B 1 Phop Phra 1 (1) - # - #	-	-	1.6	1.6	-	-	0.5	0.5	-	-	-	1,223.5						
B 10 Phop Phra 3 (8) - # - #	-	-	1.0	1.0	-	-	0.3	0.3	-	-	-	812.6						
B 11 Phop Phra 3 (9) - 2 - #	2.2	1.4	1.6	1.8	0.7	0.4	0.4	0.5	192.4	38.7	111.5	114.2	2,333.9	1642.9	1,452.4	1,809.7	a	
B 20 Phop Phra 3 (18) - # - #	-	-	1.4	1.4	-	-	0.4	0.4	-	-	104.9	104.9	-	-	1,372.2	1,372.2		
B 28 Phop Phra 3 (26) - # - #	3.5	2.0	2.2	2.6	1.0	0.5	0.7	0.7	224.0	73.5	104.8	134.1	2,582.0	1652.4	1676.2	1,970.2	a	
B 28 Phop Phra 3 (26) - # - #	3.1	1.5	1.5	2.0	0.9	0.4	0.5	0.6	345.0	49.7	99.2	164.7	2,338.8	1276.3	1,257.4	1,624.2	ab	
B 34 Phop Phra 3 (32) - # - #	3.2	1.6	2.8	2.6	0.9	0.5	0.7	0.7	221.2	15.4	131.6	122.7	2,034.8	1801.7	2,021.4	1,952.6	a	
B 35 Phop Phra 3 (33) - # - #	1.9	2.1	1.0	1.6	0.6	0.6	0.3	0.5	116.7	77.3	61.6	85.2	1,389.5	1446.7	739.5	1,191.9	bc	
Bird pepper: Chia Tai	2.2	1.6	1.0	1.6	0.6	0.5	0.3	0.5	225.0	100.1	62.9	129.3	1153.7	685.6	343.5	727.6	c	
Average	2.7 <sup>a</sup>	1.7 <sup>b</sup>	1.6 <sup>b</sup>	1.9	0.8 <sup>a</sup>	0.5 <sup>b</sup>	0.5 <sup>b</sup>	0.6	220.7 <sup>a</sup>	59.1 <sup>b</sup>	96.6 <sup>b</sup>	122.2	1,972.1 <sup>a</sup>	1,417.6 <sup>b</sup>	1,266.1 <sup>b</sup>	1,521.2		
F-test <sup>1/</sup>																		
Period				**				**				**					**	
Lines				ns				ns				ns					**	
C.V. (%)				23.3				20.0				40.3					17.3	

1 \* , 2 \* , 3 \* = The first, second and third crops were during April 2009 - March 2010, May 2009 - April 2010 and June 2009 to April 2010.

<sup>1/</sup> ns and \*\* = non significant and significant at 1 % level.

<sup>2/</sup> The same letters in the row meaned did not significant at the level 5 % by DMRT.

Appendix 4 (cont.)

Lines	Fresh yield/plant (kg.)			Dry yield/plant (kg.)			Seed yield/plant (kg.)			Fresh/Dry ratio			Fresh fruit weight (g.)																			
	1	2	3	Average	1	2	3	Average	1	2	3	Average	1	2	3	Average																
Phop Phra 1 (1) - # - #	-	-	0.8	0.8	-	-	0.2	0.2	-	-	-	67.8	-	-	3.5	-	0.6	0.6														
Phop Phra 3 (8) - # - #	-	-	0.5	0.5	-	-	0.1	0.1	-	-	-	24.6	-	-	3.6	-	0.6	0.6														
Phop Phra 3 (9) - 2 - #	1.1	0.7	0.8	0.9	0.3	0.2	0.2	0.3	103.3	19.4	55.7	59.5	3.2	3.1	4.0	3.4	0.5	0.4	0.6	0.5	c2/											
Phop Phra 3 (18) - # - #	-	-	0.7	0.7	-	-	0.2	0.2	-	-	-	52.4	-	-	3.5	-	0.5	0.5	0.5	0.5	0.5											
Phop Phra 3 (26) - # - #	1.7	1.0	1.1	1.3	0.5	0.3	0.3	0.4	120.2	36.7	53.2	70.0	3.4	3.8	3.9	3.7	0.7	0.6	0.7	0.7	0.7	b										
Phop Phra 3 (26) - # - #	1.5	0.7	0.7	1.0	0.5	0.2	0.2	0.3	179.8	24.9	49.6	84.8	3.4	3.5	3.1	3.4	0.7	0.6	0.6	0.6	0.6	bc										
Phop Phra 3 (32) - # - #	1.6	0.8	1.4	1.3	0.4	0.2	0.4	0.4	120.1	7.7	65.8	64.5	3.6	3.5	3.8	3.6	0.8	0.4	0.7	0.7	0.7	bc										
Phop Phra 3 (33) - # - #	0.9	1.0	0.5	0.8	0.3	0.3	0.1	0.2	60.9	38.6	30.8	43.4	3.2	3.7	3.8	3.6	0.7	0.7	0.7	0.7	0.7	b										
Bird pepper: Chia Tai	1.1	0.8	0.5	0.8	0.4	0.3	0.1	0.3	119.4	50.0	31.5	67.0	3.1	3.2	3.5	3.3	1.4	1.2	1.4	1.4	1.3	a										
Average	1.3	a2/	0.9	b	0.8	b	1.0	0.4	a	0.2	b	0.2	b	0.3	117.3	a <sup>2/</sup>	29.6	b	48.4	b	63.1	3.3	3.5	3.6	3.5	0.8	a	0.7	b	0.7	a	0.7
F-test <sup>1/</sup>																																
Period				**			*					**										ns										*
Lines				ns			ns					ns										ns										**
C.V. (%)				23.1			30.8					39.9										7.3										10.9



1 \* , 2 \* , 3 \* = The first, second and third crops were during April 2009 - March 2010, May 2009 - April 2010 and June 2009 to April 2010.

<sup>1/</sup> ns and \*\* = non significant and significant at 1 % level.

<sup>2/</sup> The same letters in the row or column means did not significant at the level 5 % by DMRT.

Appendix 4 (cont.)

Lines	Dry fruit weight (g.)			Fruit size : Width (cm.)			Fruit size : Length (cm.)			Harvesting date (days)			Harvesting period (days)									
	1	2	3	Average	1	2	3	Average	1	2	3	Average	1	2	3	Average	1	2	3			
	Phop Phra 1 (1) - # - #	-	-	0.2	0.2	-	-	0.8	0.8	-	-	4.4	4.4	-	-	119.0	119.0	-	-	151.0		
Phop Phra 3 (8) - # - #	-	-	0.2	0.2	-	-	0.7	0.7	-	-	3.9	3.9	-	-	119.0	119.0	-	-	151.0			
Phop Phra 3 (9) - 2 - #	0.1	0.1	0.1	0.1	c2/	0.6	0.5	0.5	c	3.5	3.5	3.5	d	122.0	112.0	137.0	123.7	175.0	188.0	133.0	165.3	
Phop Phra 3 (18) - # - #	-	-	0.2	0.2	-	-	0.8	0.8	-	-	3.4	3.4	-	-	119.0	119.0	-	-	151.0			
Phop Phra 3 (26) - # - #	0.2	0.2	0.2	0.2	b	0.8	0.6	0.7	b	4.4	3.6	3.9	4.0	bc	122.0	112.0	121.3	118.4	175.0	188.0	148.9	170.6
Phop Phra 3 (26) - # - #	0.2	0.2	0.2	0.2	b	0.7	0.7	0.7	b	4.2	3.7	3.5	3.8	cd	122.0	112.0	119.0	117.7	175.0	188.0	151.0	171.3
Phop Phra 3 (32) - # - #	0.2	0.1	0.2	0.2	b	0.8	0.7	0.7	b	4.4	4.0	4.1	4.2	b	122.0	128.5	119.0	123.2	175.0	171.5	151.0	165.8
Phop Phra 3 (33) - # - #	0.2	0.2	0.2	0.2	b	0.8	0.7	0.8	b	4.3	4.1	4.4	4.3	b	122.0	112.0	119.0	117.7	175.0	188.0	151.0	171.3
Bird pepper: Chia Tai	0.4	0.4	0.4	0.4	a	1.1	1.0	1.1	a	6.1	5.7	5.8	5.9	a	118.3	112.0	119.0	116.4	178.7	188.0	151.0	172.6
Average	0.2	0.2	0.2	0.2	0.8 <sup>2/</sup>	0.7	0.7	0.7	a	4.1	4.1	4.1	4.1	b	121.4	114.8	121.9	119.4	175.6	185.3	148.1	166.9
F-test <sup>1/</sup>																						
Period				ns					**			*						ns				**
Lines				**					**			**						ns				ns
C.V. (%)				11.0					5.4			4.3						5.0				3.5

1/ \* , 2 , 3 = The first, second and third crops were during April 2009 - March 2010, May 2009 - April 2010 and June 2009 to April 2010.

2/ ns and \*\* = non significant and significant at 1 % level.

3/ The same letters in the row or column meant did not significant at the level 5 % by DMRT.

Appendix 4 (cont.)

Lines	Plant size : Width (m.)			Plant size : Height (m.)			Scoring			Thrip			
	1	2	3	Average	1	2	3	Average	Mite 1	1	2	3	Average
Phop Phra 1 (1) - # - #	-	-	1.4	1.4	-	-	1.2	1.2	-	-	-	-	3.7
Phop Phra 3 (8) - # - #	-	-	1.7	1.7	-	-	1.3	1.3	-	-	-	-	2.6
Phop Phra 3 (9) - 2 - #	1.7	1.7	1.4	1.6 a 2/	1.1	1.2	1.1	1.1 ab	5.0	5.0	4.0	1.3	3.3
Phop Phra 3 (18) - # - #	-	-	1.5	1.5	-	-	1.2	1.2	-	-	-	-	3.3
Phop Phra 3 (26) - # - #	1.4	1.4	1.3	1.4 c	0.9	1.1	1.0	1.0 c	2.8	3.3	3.9	2.6	3.4
Phop Phra 3 (26) - # - #	1.5	1.5	1.3	1.4 bc	1.1	1.2	1.1	1.1 ab	4.3	4.3	3.7	3.9	4.0
Phop Phra 3 (32) - # - #	1.5	1.5	1.4	1.5 ab	1.2	1.3	1.2	1.2 a	3.3	4.7	3.9	2.3	3.6
Phop Phra 3 (33) - # - #	1.6	1.6	1.5	1.6 a	1.2	1.2	1.1	1.2 ab	1.3	2.0	4.4	3.9	3.4
Bird pepper: Chia Tai	1.5	1.5	1.4	1.5 bc	1.1	1.1	1.2	1.1 bc	-	3.9	3.7	3.2	3.6
Average	1.5 a <sup>2/</sup>	1.5 b	1.5 b	1.5	1.1 b	1.2 a	1.2 ab	1.1	3.3	3.9	3.9	3.0	3.6
F-test <sup>1/</sup>													
Period				**				*					ns
Lines				**				*					ns
C.V. (%)				4.3				4.4					28.9

1 \* , 2 \* , 3 \* = The first, second and third crops were during April 2009 - March 2010, May 2009 - April 2010 and June 2009 to April 2010.

<sup>1/</sup> ns and \*\* = non significant and significant at 1 % level.

<sup>2/</sup> The same letters in the row or column mean did not significant at the level 5 % by DMRT.

Appendix 4 (cont.)

Lines	Content of capsaicinoids (%w/w)															SHU								
	Nordihydrocapsaicin					Capsaicin					Dihydrocapsaicin						Total							
	1	2	3	Average		1	2	3	Average		1	2	3	Average				1	2	3	Average			
Phop Phra 1 (1) - # - #	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Phop Phra 3 (8) - # - #	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Phop Phra 3 (9) - 2 - #	0.00	0.02	0.03	0.02	0.04	0.33	0.47	0.28	cd	0.01	0.10	0.17	0.10	0.06	0.45	0.67	0.39	c	9,800	70,800	105,800	62,133	cd	
Phop Phra 3 (18) - # - #	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Phop Phra 3 (26) - # - #	0.02	0.02	0.02	0.02	0.34	0.35	0.28	0.32	b-d	0.10	0.12	0.10	0.10	0.46	0.48	0.40	0.45	bc	72,200	76,300	63,235	70,578	c	
Phop Phra 3 (26) - # - #	0.02	0.05	0.02	0.02	0.35	0.47	0.36	0.40	a-c	0.11	0.17	0.13	0.14	0.48	0.69	0.49	0.55	a-c	75,400	107,800	78,700	87,300	b	
Phop Phra 3 (32) - # - #	0.03	0.04	0.03	0.03	0.49	0.60	0.46	0.52	a	0.14	0.20	0.17	0.17	0.66	0.85	0.66	0.72	a	103,533	132,928	104,600	113,687	a	
Phop Phra 3 (33) - # - #	0.03	0.04	0.04	0.03	0.43	0.53	0.50	0.49	ab	0.11	0.17	0.16	0.15	0.57	0.74	0.68	0.66	ab	90,367	116,000	108,642	105,003	a	
Bird pepper: Chia Tai	0.02	0.03	0.03	0.03	0.14	0.25	0.25	0.21	d	0.08	0.14	0.14	0.12	0.25	0.41	0.41	0.36	c	38,579	64,800	64,800	56,060	d	
Average	0.02	0.03	0.03	0.03	0.30	0.42	0.39	0.37		0.09	0.15	0.14	0.13	0.41	0.60	0.55	0.52		64,980	94,771	87,630	82,460		
F-test <sup>1/</sup>																								
Period				ns			ns					*			ns								ns	
Lines				ns			*					ns			*								*	
C.V. (%)				31.6			24.7					23.5			24.4								24.0	

<sup>1/</sup> ns and \*\* = non significant and significant at 1 % level.

<sup>2/</sup> The same letters in the row or column mean did not significant at the level 5 % by DMRT.

Appendix 5 Yield and yield components of the 70 S<sub>0</sub> C population lines selected during 2008 to 2009.

Code	Accessions	Yield/rai (t.)		Yield/rai (kg.)	Fruits/	Yield/plant (g.)		
		Fresh	Dry	Seed	plant	Fresh	Dry	
1	Phop Phra 1	1	0.2 b-g <sup>2/</sup>	0.1 bc	8.4 b-h	243.5 b-j	102.5 c-k	27.8 d-i
2	Phop Phra 1	2	0.0 g	0.0 c	0.2 h	17.9 ij	3.1 k	0.8 i
3	Phop Phra 1	3	0.1 e-g	0.0 c	1.3 f-h	56.5 h-j	25.3 g-k	6.0 hi
4	Phop Phra 1	4	0.1 e-g	0.0 c	0.2 h	91.9 e-j	32.5 g-k	10.5 fi
5	Phop Phra 1	5	0.1 e-g	0.0 c	4.9 b-h	139.6 d-j	44.4 f-k	13.5 e-i
6	Phop Phra 1	6	0.1 e-g	0.0 c	2.5 e-h	98.8 e-j	35.4 f-k	11.2 e-i
7	Phop Phra 1	7	0.1 c-g	0.0 c	9.9 b-h	142.7 d-j	66.3 d-k	22.2 d-i
8	Phop Phra 1	8	0.1 d-g	0.0 c	1.6 e-h	142.8 d-j	39.2 f-k	12.2 e-i
9	Phop Phra 1	9	0.1 c-g	0.0 bc	6.0 b-h	229.0 b-j	72.9 d-k	22.5 d-i
10	Phop Phra 1	10	0.1 d-g	0.0 c	3.0 d-h	129.7 d-j	42.0 f-k	12.0 e-i
11	Phop Phra 1	11	0.3 b-g	0.1 b	13.7 a-d	290.3 b-h	145.0 b-f	43.2 c-e
12	Phop Phra 1	12	0.1 e-g	0.0 c	4.3 c-h	119.2 d-j	40.4 f-k	11.5 e-i
13	Phop Phra 1	13	0.1 d-g	0.0 bc	3.7 d-h	143.2 d-j	55.2 f-k	13.7 e-i
14	Phop Phra 1	14	0.1 d-g	0.0 c	3.0 d-h	130.4 d-j	53.6 f-k	10.6 fi
15	Phop Phra 1	15	0.1 b-e	0.0 b	2.3 c-h	183.3 b-e	67.5 c-j	17.0 c-j
16	Phop Phra 1	16	0.1 d-g	0.0 c	3.4 d-h	92.3 e-j	36.5 f-k	11.0 e-i
17	Phop Phra 1	17	0.1 c-g	0.0 bc	4.9 b-h	175.0 d-j	64.5 d-k	15.3 e-i
18	Phop Phra 1	18	0.1 d-g	0.0 c	5.4 b-h	215.3 b-j	63.7 e-k	15.3 e-i
19	Somma bulk		0.0 e-g	0.0 c	1.8 d-h	49.7 e-j	11.9 f-k	4.1 g-i
20	Phop Phra 1	19	0.3 bc	0.1 b	6.7 b-h	305.5 b-e	151.0 b-e	48.0 b-d
21	Phop Phra 1	20	0.0 e-g	0.0 c	1.5 f-h	53.6 h-j	16.9 h-k	5.3 hi
21self	Phop Phra 1	20	0.7 a	0.2 a	14.8 a-c	634.0 a	350.0 a	86.0 a
22	Phop Phra 2	1	0.2 c-g	0.0 bc	5.2 b-h	183.5 c-j	77.2 d-k	21.8 d-i
23	Phop Phra 2	2	0.1 d-g	0.0 c	1.8 e-h	70.7 g-j	52.9 f-k	15.8 e-i
24	Phop Phra 2	3	0.1 e-g	0.0 c	1.7 e-h	67.8 g-j	29.8 g-k	6.7 g-i
25	Phop Phra 2	4	0.2 b-g	0.1 bc	8.3 b-h	270.9 b-j	112.8 c-k	28.7 c-i
26	Phop Phra 2	5	0.0 e-g	0.0 c	2.1 e-h	81.3 e-j	24.5 g-k	6.8 g-i
27	Nipon bulk		0.0 g	0.0 c	1.2 f-h	33.7 h-j	10.3 jk	2.7 i
28	Phop Phra 3	1	0.1 e-g	0.0 c	3.7 d-h	98.6 e-j	37.5 f-k	11.5 e-i
29	Phop Phra 3	2	0.1 d-g	0.0 bc	5.9 b-h	117.2 d-j	61.8 f-k	15.8 e-i
30	Phop Phra 3	3	0.3 b-f	0.1 b	11.9 b-f	229.4 b-j	129.1 c-h	32.4 c-i
31	Phop Phra 3	4	0.1 e-g	0.0 c	3.1 d-h	79.3 e-j	30.8 g-k	9.5 g-i
32	Phop Phra 3	5	0.2 b-g	0.1 b	5.4 b-h	222.5 b-j	99.0 c-k	28.8 c-i
33	Phop Phra 3	6	0.2 b-g	0.0 bc	7.9 b-h	239.4 b-j	108.8 c-k	24.7 d-i
34	Phop Phra 3	7	0.1 c-g	0.0 bc	7.1 b-h	254.1 b-j	63.5 e-k	20.4 e-i
35	Phop Phra 4	1	0.1 c-g	0.0 c	3.1 c-h	112.3 d-j	31.9 f-k	10.5 e-i
36	Phop Phra 4	2	0.1 e-g	0.0 c	4.6 c-h	95.5 e-j	35.2 f-k	11.6 e-i
37	Phop Phra 4	3	0.3 b-d	0.1 b	8.8 b-h	370.4 b-d	134.8 b-g	42.7 c-f
38	Phop Phra 4	4	0.3 bc	0.1 b	22.0 a	300.1 b-f	172.5 bc	55.3 a-c
39	Phop Phra 4	5	0.0 e-g	0.0 c	4.2 c-h	83.8 e-j	24.8 g-k	7.2 g-i

## Appendix 5 (cont.)

Code	Accessions	Yield/rai (t.)		Yield/rai (kg.)	Fruits/	Yield/plant (g.)	
		Fresh	Dry	Seed	plant	Fresh	Dry
40	Phop Phra 4 6	0.1 d-g <sup>2/</sup>	0.0 c	3.2 d-h	138.7 d-j	38.6 f-k	10.2 g-i
41	Phop Phra 4 7	0.1 d-g	0.0 bc	10.2 b-h	107.8 d-j	49.1 f-k	15.2 e-i
42	Phop Phra 4 8	0.1 d-g	0.0 c	4.6 c-h	111.1 d-j	50.4 f-k	15.1 e-i
43	Phop Phra 4 9	0.2 b-g	0.1 bc	10.9 b-h	203.7 b-j	100.0 c-k	29.0 c-i
44	Umpang bulk -	0.2 b-f	0.1 b	14.9 ab	423.7 ab	105.5 c-i	34.9 c-g
45	Nai bulk -	0.2 c-g	0.1 bc	11.4 b-g	218.3 b-j	97.7 c-k	27.0 d-i
46	Grubo bulk 1 -	0.1 d-g	0.0 c	5.4 b-h	208.0 b-j	52.7 f-k	16.6 e-i
47	Grubo bulk 2 -	0.0 g	0.0 c	1.4 f-h	37.0 h-j	12.6 jk	3.9 hi
48	Guileito bulk -	0.1 e-g	0.0 c	4.2 c-h	152.6 d-j	45.1 f-k	11.0 e-i
49	Mae Ramad 1 1	0.3 bc	0.1 b	15.7 ab	443.5 a-c	174.5 b-d	53.1 b-d
50	Mae Ramad 1 2	0.0 g	0.0 c	1.0 f-h	84.5 e-j	19.3 h-k	4.1 hi
51	Mae Ramad 1 3	0.0 e-g	0.0 c	1.3 f-h	49.4 h-j	16.4 i-k	4.2 hi
52	Mae Ramad 1 4	0.0 e-g	0.0 c	0.3 f-h	59.3 e-j	10.0 g-k	4.9 g-i
53	Mae Ramad 1 5	0.1 d-g	0.0 c	1.0 f-h	180.4 d-j	48.6 f-k	12.6 e-i
54	Mae Ramad 1 6	0.0 e-g	0.0 c	1.4 e-h	50.9 e-j	18.1 f-k	5.9 g-i
55	Mae Ramad 1 7	0.0 e-g	0.0 c	1.6 e-h	68.5 g-j	23.3 g-k	7.6 g-i
56	Mae Ramad 1 8	0.2 c-g	0.0 c	6.0 b-h	270.6 b-j	75.8 d-k	21.5 d-i
57	Mae Ramad 1 9	0.2 c-g	0.0 bc	5.8 b-h	281.9 b-i	75.3 d-k	23.2 d-i
58	Mae Ramad 1 10	0.0 g	0.0 c	0.1 h	95.1 e-j	17.1 h-k	1.8 i
59	Mae Ramad bulk	0.1 e-g	0.0 c	2.4 e-h	93.2 e-j	25.2 g-k	7.5 g-i
60	Ya bulk	0.2 b-f	0.1 b	9.4 b-h	338.1 b-d	99.1 c-j	31.7 c-h
61	Mongkog 1	0.1 e-g	0.0 c	3.7 d-h	147.2 d-j	33.9 f-k	10.3 f-i
62	Mongkog 2	0.1 c-g	0.0 c	6.0 b-h	217.6 b-j	54.1 d-k	18.2 d-i
63	Mayaejae 1	0.0 e-g	0.0 c	3.8 c-h	139.7 d-j	23.3 f-k	8.0 e-i
64	Somsak	0.1 c-g	0.0 c	7.4 b-h	293.7 b-g	64.2 d-k	20.9 d-i
65	Mayaejae 2	0.0 e-g	0.0 c	0.4 gh	55.9 e-j	11.5 g-k	3.7 hi
66	Paekeag	0.2 b-g	0.1 b	11.4 b-g	315.4 b-e	109.0 c-i	30.6 c-i
67	Musae	0.0 e-g	0.0 c	1.5 e-h	43.8 f-j	12.0 g-k	3.7 hi
68	Sutad	0.2 b-g	0.1 b	12.5 b-e	431.0 ab	103.7 c-j	33.0 c-h
69	Jaipo	0.1 c-g	0.0 c	4.5 c-h	120.1 d-j	48.1 f-k	13.4 e-i
70	Aumkoy	0.1 d-g	0.0 c	2.3 e-h	32.6 j	33.9 h-k	8.2 hi
Accession average		0.1	0.0	5.3	169.1	62.0	17.8
Brurapa : Lion Brand		0.0 fg	0.0 c	1.5 f-h	73.4 e-j	14.9 g-k	4.8 hi
Bird Pepper: Chai Tai		0.1 c-g	0.0 c	4.5 c-h	40.8 g-j	27.6 f-k	9.4 e-i
Vieng Ping: Chu Youn Saeg		0.4 b	0.2 a	15.9 ab	221.1 b-j	221.3 b	76.5 ab
Check average		0.2	0.1	7.3	111.8	87.9	30.2
F-test <sup>1/</sup>		**	**	**	**	**	**
C.V.(%)		74.5	104.9	79.5	60.6	65.6	65.7

<sup>1/</sup> \*\* = Significant at 1 % level.<sup>2/</sup> The same letters in the column mean did not significant at the level 5 % by DMRT

## Appendix 5 (cont.)

Code	Accessions	Fresh/Dry	Fruit weight (g.)			Harvesting (days)			Scoring *				
			ratio	Fresh	Dry	Date	Period	M1	M2	Average	T 1	T 2	Average
1	Phrob Phra 1 1	1	3.2	0.4 d-h <sup>2/</sup>	0.1 cd	136.0	75.7	1.6	2.4	2.0 t	3.0	2.5	2.8 k
2	Phrob Phra 1 2	2	4.1	0.2 i	0.0 e	131.5	46.5	5.0	5.0	5.0 a	5.0	5.0	5.0 a
3	Phrob Phra 1 3	3	3.9	0.4 d-h	0.1 cd	77.0	60.5	4.5	4.5	4.5 a-h	5.0	5.0	5.0 a
4	Phrob Phra 1 4	4	5.1	0.4 d-f	0.1 cd	131.5	25.3	3.9	4.0	3.9 c-o	5.0	5.0	5.0 a
5	Phrob Phra 1 5	5	3.3	0.3 f-i	0.1 cd	131.5	69.3	4.0	4.4	4.2 a-m	5.0	5.0	5.0 a
6	Phrob Phra 1 6	6	3.3	0.4 e-i	0.1 cd	131.5	67.2	4.0	4.0	4.0 b-n	4.9	4.8	4.9 a-d
7	Phrob Phra 1 7	7	2.9	0.4 d-g	0.1 cd	157.3	5.7	4.5	3.5	4.0 b-n	5.0	5.0	5.0 a
8	Phrob Phra 1 8	8	3.2	0.3 g-i	0.1 cd	126.0	77.5	4.7	4.7	4.7 a-d	5.0	5.0	5.0 a
9	Phrob Phra 1 9	9	3.2	0.3 f-i	0.1 cd	134.3	71.1	4.7	4.6	4.6 a-e	5.0	5.0	5.0 a
10	Phrob Phra 1 10	10	3.6	0.3 e-i	0.1 cd	140.5	79.0	3.9	3.6	3.8 g-q	4.8	4.6	4.7 a-g
11	Phrob Phra 1 11	11	3.5	0.5 d-f	0.1 bc	126.0	92.3	3.2	2.8	3.0 q-s	4.7	4.3	4.5 a-g
12	Phrob Phra 1 12	12	3.4	0.4 d-h	0.1 cd	126.0	71.0	4.8	4.7	4.7 a-c	5.0	5.0	5.0 a
13	Phrob Phra 1 13	13	4.0	0.4 d-h	0.1 cd	132.8	74.8	5.0	5.0	5.0 a	5.0	5.0	5.0 a
14	Phrob Phra 1 14	14	4.0	0.4 e-i	0.1 cd	126.0	75.7	4.7	4.5	4.6 a-f	5.0	5.0	5.0 a
15	Phrob Phra 1 15	15	2.0	0.2 e-i	0.0 cd	70.0	56.5	-	-	-	-	-	-
16	Phrob Phra 1 16	16	3.4	0.3 e-i	0.1 cd	156.0	57.0	4.3	4.4	4.4 a-k	4.6	4.3	4.4 a-h
17	Phrob Phra 1 17	17	3.8	0.2 g-i	0.1 de	126.0	57.0	-	-	-	-	-	-
18	Phrob Phra 1 18	18	3.8	0.3 g-i	0.1 cd	140.5	64.0	-	-	-	-	-	-
19	Somma bulk		3.0	0.2 hi	0.1 cd	146.4	29.0	4.0	3.3	3.7 i-q	5.0	5.0	5.0 a
20	Phrob Phra 1 19	19	3.1	0.5 c-e	0.2 b	123.0	42.0	4.0	2.5	3.3 n-r	5.0	4.5	4.8 a-f
21	Phrob Phra 1 20	20	3.7	0.3 f-i	0.1 cd	150.5	85.2	3.6	3.7	3.7 i-q	5.0	4.5	4.8 a-f
21self	Phrob Phra 1 20	20	4.1	0.6 cd	0.1 cd	140.0	113.0	-	-	-	-	-	-
22	Phrob Phra 2 1	1	2.8	0.3 g-i	0.1 de	163.0	57.0	-	-	-	-	-	-
23	Phrob Phra 2 2	2	3.2	0.7 bc	0.3 a	126.0	105.0	3.5	3.3	3.4 m-r	5.0	5.0	5.0 a
24	Phrob Phra 2 3	3	3.3	0.4 d-h	0.1 cd	126.0	37.0	-	-	-	-	-	-
25	Phrob Phra 2 4	4	3.0	0.3 f-i	0.1 cd	131.5	57.0	4.8	4.8	4.8 ab	5.0	5.0	5.0 a
26	Phrob Phra 2 5	5	3.6	0.3 f-i	0.1 cd	148.5	57.0	-	-	-	-	-	-
27	Nipon bulk		3.3	0.3 g-i	0.1 de	146.0	78.5	4.3	4.3	4.3 a-l	5.0	5.0	5.0 a
28	Phrob Phra 3 1	1	3.5	0.2 g-i	0.0 de	179.3	27.8	4.0	3.7	3.9 e-p	4.7	4.3	4.5 a-g
29	Phrob Phra 3 2	2	3.8	0.4 d-f	0.1 cd	131.5	42.5	4.6	4.5	4.6 a-g	5.0	4.9	4.9 ab
30	Phrob Phra 3 3	3	3.9	0.5 cd	0.1 bc	138.6	89.3	3.0	2.5	2.8 rs	4.2	3.5	3.9 hi
31	Phrob Phra 3 4	4	3.2	0.4 e-i	0.1 cd	126.0	99.5	3.0	2.5	2.8 rs	4.8	4.0	4.4 a-h
32	Phrob Phra 3 5	5	3.4	0.4 d-f	0.1 bc	163.0	59.2	3.9	3.7	3.8 f-q	4.5	3.7	4.1 g-i
33	Phrob Phra 3 6	6	4.3	0.5 d-f	0.1 cd	130.5	98.3	3.6	3.8	3.7 h-q	4.8	4.1	4.4 a-h
34	Phrob Phra 3 7	7	3.2	0.3 g-i	0.1 cd	158.5	66.3	4.2	4.5	4.3 a-k	4.8	4.5	4.6 a-g
35	Phrob Phra 4 1	1	3.1	0.3 f-i	0.1 cd	141.0	29.5	4.6	4.3	4.5 a-i	-	-	-
36	Phrob Phra 4 2	2	3.1	0.3 e-i	0.1 cd	143.3	73.8	4.8	4.8	4.8 ab	4.9	4.7	4.8 a-e
37	Phrob Phra 4 3	3	3.1	0.4 d-h	0.1 cd	149.5	80.5	4.1	3.6	3.8 e-p	4.6	4.0	4.3 c-h
38	Phrob Phra 4 4	4	3.1	0.5 c-e	0.2 b	123.0	87.7	3.6	3.4	3.5 l-r	4.3	4.1	4.2 e-i
39	Phrob Phra 4 5	5	3.8	0.3 f-i	0.1 cd	130.5	56.7	4.3	4.0	4.2 b-m	4.8	4.6	4.7 a-g

## Appendix 5 (cont.)

Code	Accessions	Fresh/Dry	Fruit weight (g.)		Harvesting (days)		Scoring *						
			ratio	Fresh	Dry	Date	Period	M1	M2	Average	T 1	T 2	Average
40	Phrob Phra 4	6	4.0	0.3 g-l <sup>2/</sup>	0.1 cd	131.5	96.0	4.2	3.0	3.6 j-q	4.5	4.0	4.3 d-h
41	Phrob Phra 4	7	4.3	0.4 d-f	0.1 cd	139.0	43.8	3.9	3.3	3.6 j-q	4.5	3.9	4.2 e-i
42	Phrob Phra 4	8	3.5	0.5 d-f	0.1 bc	140.5	80.2	3.7	3.2	3.4 m-r	4.0	3.3	3.7 ij
43	Phrob Phra 4	9	3.6	0.5 d-f	0.1 bc	135.3	73.8	3.8	3.0	3.4 m-r	4.8	4.1	4.5 a-h
44	Umpang bulk	-	3.0	0.2 hi	0.1 cd	136.5	77.5	4.4	4.3	4.4 a-k	4.8	4.5	4.6 a-g
45	Nai bulk	-	3.7	0.4 d-f	0.1 cd	128.7	87.3	4.4	3.4	3.9 d-p	4.6	3.7	4.1 f-i
46	Grubo bulk 1	-	3.2	0.3 g-i	0.1 cd	130.5	85.3	4.5	4.5	4.5 a-h	5.0	4.8	4.9 a-c
47	Grubo bulk 2	-	3.1	0.3 f-i	0.1 cd	133.3	43.5	4.6	4.7	4.7 a-e	4.9	4.6	4.8 a-f
48	Guileito bulk	-	3.8	0.3 f-i	0.1 cd	138.3	79.0	4.3	3.7	4.0 b-n	4.7	4.3	4.5 a-g
49	Mae Ramad 1	1	3.1	0.3 f-i	0.1 cd	132.8	70.8	4.8	4.5	4.6 a-e	4.7	4.3	4.5 a-g
50	Mae Ramad 1	2	5.1	0.2 g-i	0.0 de	140.8	62.0	4.7	4.6	4.7 a-e	4.8	4.5	4.6 a-g
51	Mae Ramad 1	3	3.6	0.3 f-i	0.1 cd	135.3	43.9	4.6	4.2	4.4 a-j	5.0	4.9	4.9 ab
52	Mae Ramad 1	4	2.7	0.2 hi	0.1 cd	141.5	29.0	4.6	4.7	4.7 a-e	5.0	5.0	5.0 a
53	Mae Ramad 1	5	3.9	0.3 f-i	0.1 cd	140.0	94.0	-	-	-	-	-	-
54	Mae Ramad 1	6	3.1	0.4 d-g	0.1 cd	123.0	46.7	5.0	5.0	5.0 a	4.9	4.5	4.7 a-g
55	Mae Ramad 1	7	3.4	0.3 f-i	0.1 cd	131.5	61.7	3.4	2.8	3.1 p-s	4.8	4.3	4.5 a-g
56	Mae Ramad 1	8	3.4	0.3 g-i	0.1 cd	138.8	73.8	4.6	4.4	4.5 a-h	4.9	4.7	4.8 a-e
57	Mae Ramad 1	9	3.2	0.3 g-i	0.1 cd	126.0	91.8	4.5	4.2	4.3 a-k	5.0	4.9	4.9 ab
58	Mae Ramad 1	10	3.5	0.2 g-i	0.0 de	154.0	19.7	3.9	3.5	3.7 h-q	4.7	5.0	4.9 a-d
59	Mae Ramad bulk		3.6	0.2 i	0.0 de	152.9	30.4	4.4	3.6	4.0 b-n	-	-	3.1
60	Ya bulk		3.1	0.3 f-i	0.1 cd	129.8	74.3	4.2	4.1	4.1 b-m	4.9	4.9	4.9 a-c
61	Mongkog 1		4.3	0.2 i	0.1 de	149.5	85.2	4.5	4.3	4.4 a-j	4.7	4.5	4.6 a-g
62	Mongkog 2		3.3	0.2 hi	0.1 cd	149.4	50.4	4.0	3.3	3.6 i-q	4.5	3.9	4.2 e-i
63	Mayaejae 1		2.9	0.2 hi	0.1 cd	136.5	43.3	4.6	4.4	4.5 a-h	4.9	4.8	4.8 a-d
64	Somsak		3.2	0.2 hi	0.1 cd	136.5	61.3	3.8	3.3	3.5 k-r	4.4	4.0	4.2 e-i
65	Mayaejae 2		3.2	0.2 hi	0.1 cd	132.0	34.0	3.8	3.6	3.7 h-q	4.6	4.1	4.4 b-h
66	Paekeag		3.3	0.3 f-i	0.1 cd	138.0	70.3	3.7	4.0	3.8 e-p	4.8	4.5	4.6 a-g
67	Musae		3.2	0.3 f-i	0.1 cd	148.3	18.5	4.1	3.8	4.0 c-o	4.9	4.8	4.9 a-d
68	Sutad		3.1	0.2 hi	0.1 cd	137.7	66.3	4.0	3.3	3.7 i-q	4.7	4.0	4.3 b-h
69	Jaipo		2.8	0.4 d-g	0.1 cd	130.3	46.3	3.9	2.9	3.4 m-r	4.4	3.9	4.1 f-i
70	Aumkoy		4.1	1.0 a	0.3 a	129.0	105.0	-	-	-	-	-	-
Accession average			3.5	0.3	0.1	136.1	64.0	4.2	3.9	4.0	4.8	4.5	4.6
Brurapa : Lion Brand			3.7	0.2 hi	0.1 cd	193.5	22.5	4.6	4.9	4.7 a-c	4.3	4.8	4.5 a-g
Bird Pepper: Chai Ta			3.0	0.7 b	0.2 b	153.9	53.4	1.6	3.3	2.5 st	2.6	4.0	3.3 jk
Vieng Ping: Chu Youn S:			2.9	1.0 a	0.3 a	172.1	48.4	2.8	3.5	3.1 o-s	2.6	3.0	2.8 k
Check average			3.2	0.6	0.2	173.2	41.4	3.0	3.9	3.5	3.2	3.9	3.5
F-test <sup>1/</sup>			ns	**	**	ns	ns			**			**
C.V.(%)			17.1	22.3	34.1	13.8	76.8			8.5			5.6

<sup>1/</sup> \*\* = Significant at 1 % leve <sup>2/</sup> The same letters in the column meaned did not significant at the level 5 % by DMRT.

\* Only the second crop measurement.

\*\* 1 and 2 = Scoring on Dec 10, 08 and Jan 16, 09.

Appendix 6 Yield and yield components of the 14 first generation of the C population pepper lines selected during October 2008 to May 2010 (3 crops\*).

Code	Lines	Yield/rai				Fruits/ plant				Fruit weight				Fruit size				Harvesting				Scoring	
		Fresh		Dry		Fresh		Dry		Fresh		Dry		Fresh		Dry		Date		Period		Mite	Thrip
		(t.)	(t.)	(kg.)	(kg.)	(fruits)	(kg.)	(kg.)	(kg.)	(g.)	(g.)	(g.)	(g.)	(cm.)	(cm.)	(cm.)	(cm.)	(days)	(days)	(days)	(days)		
1	Phop Phra 1 (1) - #	0.7	0.2	1.2	486.0	0.2	0.1	3.2	0.4	0.1	0.7	3.4	-	-	-	-	132.8	51.7	4.2	4.1			
9	Phop Phra 1 (9) - #	0.0	0.0	-	28.0	0.0	0.0	3.2	0.3	0.1	-	-	-	-	-	149.0	1.0	4.5	5.0				
11	Phop Phra 1 (11) - #	1.5	0.5	110.8	1,534.5	0.4	0.1	3.3	0.5	0.1	0.5	3.5	1.7	1.2	119.0	151.0	-	2.8					
17	Phop Phra 1 (17) - #	0.1	0.0	2.8	138.0	0.1	0.0	3.0	0.3	0.1	-	-	-	-	143.5	30.3	4.1	3.7					
18	Phop Phra 1 (18) - #	0.9	0.3	10.9	773.3	0.3	0.1	3.1	0.3	0.1	0.7	3.4	-	-	97.7	46.1	4.0	3.9					
21self	Phop Phra 1 (20) - 1	0.8	0.2	47.6	547.9	0.3	0.1	3.5	0.6	0.2	0.7	3.7	1.4	1.2	106.7	75.9	4.0	2.8					
22	Phop Phra 2 (1) - #	0.9	0.3	4.9	525.3	0.3	0.1	3.4	0.5	0.2	0.6	3.6	-	-	136.5	74.1	3.9	3.7					
25	Phop Phra 2 (4) - #	0.3	0.1	15.8	194.2	0.1	0.0	3.3	0.6	0.2	-	-	-	-	137.0	46.4	3.8	3.3					
30	Phop Phra 3 (3) - #	1.0	0.3	27.1	489.9	0.4	0.1	3.5	0.8	0.2	0.7	4.5	1.2	1.0	110.9	70.4	2.7	2.1					
33	Phop Phra 3 (6) - #	0.1	0.0	0.8	109.3	0.1	0.0	3.5	0.5	0.2	-	-	-	-	152.6	26.5	3.2	3.4					
37	Phop Phra 4 (3) - #	0.4	0.1	1.4	323.6	0.1	0.4	3.0	0.4	0.1	0.5	2.9	-	-	108.3	31.2	3.1	3.0					
38	Phop Phra 4 (4) - 2	1.2	0.4	49.3	612.5	0.3	0.1	3.2	0.7	0.2	0.7	4.1	1.4	1.2	93.3	104.5	-	3.8					
49	Mae Ramad 1 (1) - #	0.3	0.1	3.1	301.7	0.1	0.0	3.1	0.3	0.1	0.7	2.2	-	-	150.0	30.7	4.4	3.5					
57	Mae Ramad 1 (9) - #	0.1	0.0	3.4	186.8	0.1	0.0	3.2	0.3	0.1	-	-	-	-	150.0	20.8	4.6	4.3					
A	Brurapa : Lion Brand	0.7	0.2	34.1	487.4	0.3	0.1	3.2	0.6	0.2	0.7	3.9	1.3	1.2	135.8	63.5	3.7	3.7					
B	Bird Pepper: Chai Tai	0.6	0.2	34.6	194.0	0.3	0.1	3.1	1.4	0.6	1.0	5.7	1.4	1.2	125.3	102.6	0.9	2.0					
C	Vieng Ping: Chu Youn Sa	0.3	0.1	13.5	122.9	0.1	0.0	3.4	0.9	0.3	1.0	3.6	1.6	1.6	133.2	76.5	1.7	1.6					
D	Jee Chad : 3 A	0.3	0.1	-	263.6	0.1	0.0	3.0	0.6	0.1	0.7	3.3	-	-	67.5	38.5	-	-					

\* 1 = October 2008 to June 2009 2 = June 2009 to April 2010. 3 = July 2009 to May 2010.

Appendix 7 The yield and yield components of the 3 generations of the C population lines selected during 2008 to 2010 at Lampang province.

Code	Lines/Checks	Fresh yield/rai (t.)			Dry yield/rai (t.)			Fruits/plant (fruit)			Yield/plant (kg.)			Fresh/Dry ratio					
		1	2	3	Average	1	2	3	Average	1	2	3	Average	Fresh	Dry	1	2	3	Average
C 1	Phop Phra 1 ( 1 )	0.2	0.7	1.2	0.7	0.1	0.2	0.4	0.2	243.5	486.0	797.0	508.8 ab <sup>2/</sup>	0.2	0.1	3.2	3.2	3.0	3.1
C 18	Phop Phra 1 ( 18 )	0.1	0.9	1.6	0.9	0.0	0.3	0.6	0.3	215.3	773.3	1,306.0	764.9 a	0.3	0.1	3.8	3.1	2.8	3.2
C 21	Phop Phra 1 ( 20 )	0.7	0.8	0.5	0.7	0.2	0.2	0.1	0.2	634.0	547.9	287.0	489.6 ab	0.3	0.1	4.1	3.5	3.1	3.6
C 22	Phop Phra 2 ( 1 )	0.2	0.9	1.6	0.9	0.0	0.3	0.5	0.3	183.5	525.3	902.8	537.2 ab	0.3	0.1	2.8	3.4	2.9	3.0
C 37	Phop Phra 4 ( 3 )	0.3	0.4	0.7	0.4	0.1	0.1	0.2	0.1	370.4	323.6	472.0	388.7 ab	0.1	0.2	3.1	3.0	2.8	3.0
C 49	Mae Ramad 1 ( 1 )	0.3	0.3	0.5	0.4	0.1	0.1	0.2	0.1	443.5	301.7	473.8	406.3 ab	0.1	0.0	3.1	3.1	2.5	2.9
A	Brurapa : Lion Brand	0.0	0.7	0.9	0.6	0.0	0.2	0.3	0.2	73.4	487.4	489.1	349.9 ab	0.2	0.1	3.7	3.2	2.8	3.2
B	Bird Pepper: Chai Tai	0.1	0.6	0.3	0.3	0.0	0.2	0.2	0.1	40.8	194.0	61.5	98.8 b	0.1	0.1	3.0	3.1	2.2	2.8
C	Vieng Ping: Chu Youn Saeg	0.4	0.3	0.3	0.3	0.2	0.1	0.1	0.1	221.1	122.9	71.5	138.5 b	0.1	0.0	2.9	3.4	3.2	3.2
D	Jee Chad : 3 A	-	0.3	0.5	0.4	-	0.1	0.1	0.1	-	263.6	262.3	263.0 b	0.1	0.0	-	3.0	3.2	3.1
Average		0.3 b <sup>2/</sup>	0.6 a	0.8 a	0.1 b	0.2 a	0.3 a	0.3 a	0.3 a	269.5 b	402.6 ab	512.3 a	394.6	3.3 a	3.2 a	2.9 b	3.1	3.1	3.1
F - test <sup>1/</sup>	Generations	**																	
	Lines/Checks	ns																	
C.V. (%)		57.7																	
		69.7																	
		58.2																	
		62																	
		12.2																	
		9.2																	

<sup>1/</sup> ns, \* and \*\* = Non significant and significant at 5 % and 1 % level.

<sup>2/</sup> The same letters in the row and column mean did not significant at the level 5 % by DMRT.

Appendix 7 (cont.)

Code	Lines/Checks	Fresh fruit weight (g.)			Dry fruit weight (g.)			Fruit size (cm.)			Harvesting date (days)			Harvesting Period		
		1	2	3	Average	1	2	3	Average	Width	Length	1	2		3	Average
C 1	Phop Phra 1 ( 1 )	0.4	0.4	0.5	0.4 b <sup>2/</sup>	0.1	0.1	0.2	0.1 bc	0.7 b	3.4 d	136.0	132.8	135.0	134.6	71.1
C 18	Phop Phra 1 (18)	0.3	0.3	0.3	0.3 b	0.1	0.1	0.2	0.1 bc	0.7 b	3.4 d	140.5	97.7	132.0	123.4	77.8
C 21	Phop Phra 1 (20)	0.6	0.6	0.6	0.6 b	0.1	0.2	0.1	0.1 bc	0.7 bc	3.6 c	140.0	106.7	138.0	128.2	82.4
C 22	Phop Phra 2 ( 1 )	0.3	0.5	0.5	0.4 b	0.1	0.2	0.2	0.1 bc	0.6 c	3.6 cd	163.0	136.5	135.0	144.8	78.2
C 37	Phop Phra 4 ( 3 )	0.4	0.4	0.4	0.4 b	0.1	0.1	0.1	0.1 bc	0.5 d	2.9 f	149.5	108.3	137.0	131.6	64.2
C 49	Mae Ramad 1 ( 1 )	0.3	0.3	0.3	0.3 b	0.1	0.1	0.1	0.1 bc	0.7 b	2.2 g	132.8	150.0	154.5	145.7	49.1
A	Brurapa : Lion Brand	0.2	0.6	0.6	0.5 b	0.1	0.2	0.3	0.2 bc	0.7 bc	3.9 b	193.5	135.8	135.0	154.8	41.8
B	Bird Pepper: Chai Tai	0.7	1.4	1.6	1.2 a	0.2	0.6	1.0	0.6 a	1.0 a	5.6 a	153.9	125.3	135.0	138.0	82.8
D	Vieng Ping: Chu Youn Saeg	1.0	0.9	1.2	1.0 a	0.3	0.3	0.4	0.3 b	0.9 a	3.4 cd	172.1	133.2	135.0	146.8	67.5
D	Jee Chad : 3 A	-	0.6	0.6	0.6 b	-	0.1	0.1	0.1 c	0.7 b	3.2 e	-	67.5	137.6	102.6	55.4
Average		0.4 b <sup>2/</sup>	0.6 ab	0.7 a	0.6	0.1 b	0.2 at	0.3 a	0.2	0.7	3.5	153.5 a	119.4 b	137.4 a		67.0
F - test <sup>1/</sup>	Generations				*				*	ns	ns				**	ns
	Lines/Checks				**				**	**	**				ns	ns
C.V. (%)					27.5				62.1	4.78	2.46				12.1	35.9

<sup>1/</sup> ns, \* and \*\* = Non significant and significant at 5 % and 1 % level.

<sup>2/</sup> The same letters in the row and column mean did not significant at the level 5 % by DMRT.

Appendix 8 Yield and yield components of the local pepper lines selected during May 2008 to January 2009 at Phrob Phra, Tak.

Code Lines	Fresh yield/rai			Seed yield/rai			Fruit/ plant			Fresh d/plant			Dry Fresh/ d/plant			Fruit weight			Fruit size			Harvesting date *			Harvesting period
	(t.)			(t.)			(fruit)			(g.)			(g.)			(g.)			(day)			(day)			
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	
2 Phop Phra 2 (1)	0.1	0.0	10.9	87.6	44.0	12.0	3.0	0.5	0.1	0.1	0.0	0.1	3.2	0.5	212.0	187.5	207.0	202.2	51.3						
4 Phop Phra 3 (2)	0.1	0.0	7.6	103.2	48.9	12.8	3.2	0.5	0.1	0.1	0.1	0.1	3.4	0.5	194.0	187.5	207.0	196.2	47.8						
10 Phop Phra 3 (8)	0.1	0.0	14.3	94.6	65.1	17.1	3.5	0.7	0.2	0.1	0.1	0.1	4.1	0.6	194.0	207.0	207.0	202.7	45.3						
11 Phop Phra 3 (9)	0.1	0.0	14.9	157.3	71.0	20.4	3.1	0.5	0.1	0.1	0.1	0.1	3.9	0.6	203.0	207.0	207.0	205.7	47.5						
20 Phop Phra 3 (18)	0.1	0.0	17.0	115.5	69.6	22.2	2.9	0.6	0.1	0.0	0.1	0.1	3.6	0.6	194.0	207.0	207.0	202.7	48.8						
21 Phop Phra 3 (19)	0.2	0.1	20.9	221.4	110.7	34.1	3.2	0.6	0.1	0.1	0.1	0.1	3.5	0.6	194.0	197.3	197.3	196.2	61.5						
22 Phop Phra 3 (20)	0.1	0.0	5.5	60.3	26.4	6.8	3.2	0.4	0.1	0.1	0.1	0.1	3.0	0.6	194.0	207.0	207.0	202.7	39.9						
26 Phop Phra 3 (24)	0.2	0.1	25.0	175.5	119.1	33.4	3.3	0.6	0.2	0.1	0.1	0.1	3.6	0.6	194.0	207.0	207.0	202.7	55.3						
28 Phop Phra 3 (26)	0.1	0.0	12.8	118.7	65.5	16.6	3.3	0.6	0.2	0.1	0.1	0.1	3.9	0.6	194.0	207.0	207.0	202.7	48.0						
31 Phop Phra 3 (29)	0.1	0.0	2.4	152.0	74.0	4.0	3.4	0.4	-	-	0.1	0.0	1.8	0.3	-	207.0	207.0	207.0	53.0						
34 Phop Phra 3 (32)	0.0	0.0	4.0	58.0	24.7	6.3	3.5	0.4	0.1	-	-	0.0	1.1	0.2	194.0	207.0	207.0	202.7	17.3						
35 Phop Phra 3 (33)	0.1	0.0	4.9	50.4	28.4	5.9	3.3	0.6	0.1	0.1	-	0.1	2.4	0.4	194.0	207.0	207.0	202.7	50.2						
Accession average	0.1	0.0	11.7	116.2	62.3	16.0	3.2	0.5	0.1	0.1	0.1	0.1	3.1	0.5	196.5	202.9	206.2	202.2	47.1						
A Brurapa	0.1	0.0	4.6	72.9	45.5	8.7	3.4	0.6	-	0.1	0.1	0.1	3.9	0.6	194.0	207.0	207.0	202.7	45.7						
B Bird Pepper	0.0	-	-	2.8	1.6	-	-	0.6	-	-	-	-	-	-	-	-	-	207.0	207.0	33.0					
C Vieng Ping	0.0	-	0.3	7.6	7.7	-	-	0.6	-	-	-	-	1.6	0.4	194.0	207.0	-	200.5	36.5						
Check average	0.0	0.0	1.6	27.8	18.3	2.9	1.1	0.6	-	a2/	0.0	b	0.0	b	0.0	1.8	0.3	194.0	a	207.0	a	203.4	38.4		
F-test <sup>1/</sup>																									
Farmer	ns	ns	ns	ns	ns	ns	ns	ns	ns	*	ns	ns	ns	ns	ns	ns	ns	ns	**	ns					
Accession	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns					
C.V. (%)	7.6	16.4	7.5	8.4	8.7	8.5	11.9	26.5					31.5	11.0	9.7										

1, 2 and 3 = Mr. Nipon SanenJa, Mrs. RunJun Tino and Mr. Nai Taowatanarungroj.

<sup>1/</sup> ns and \*\* = non significant and significant at 1 % level.

<sup>2/</sup> The same letters in the column mean did not significant at the level 5 % by DMRT.



