

**DEPARTMENT OF AGRICULTURE**  
**Ministry of Agriculture and Forests**



**Inventory of Released and De-notified**  
**Crops in Bhutan (1988-2021)**

**July 2021**

Ngawang, Agriculture Research and Extension Division (ARED), DoA

**Layout and Design:**

Ngawang, ARED, DoA

**Published By:**

Agriculture Research and Extension Division

Department of Agriculture

Ministry of Agriculture & Forests

Thimphu: Bhutan

Tel# 02-322228/331316

## FOREWORD

The Department of Agriculture is pleased to bring out a publication comprising an inventory of notified and de-notified crop varieties in Bhutan.

The primary objectives of this publication are to:

- Provide an update on improved varieties released from 1988 to 2021 along with their agronomic information.
- Provide basic information/data on all released varieties, which will serve as a useful reference for researchers, policy makers, regulatory authorities and crop genetic conservationists in the country.

Data for this publication is sourced from the minutes of the Variety Release Committee (VRC) meetings and available literatures published in the country.

The department takes pride in placing on record the release of 278 improved varieties of field and horticulture crops between the years 1988 and 2021, offering a comprehensive basket of technological choice to our growers. To date, the Ministry of Agriculture & Forests has released 110 fruit plants, 111 vegetables crops, 53 field crops and 4 plantation crop varieties.

As new varieties are released, the old and obsolete varieties are withdrawn from production in order to keep the number of varieties for seed production at a manageable level. Therefore, a total of 37 varieties (27 vegetables, 9 field crops and 1 fruit crops) were de-notified between 1989 and 2015. Seed production of such de-notified varieties is gradually discontinued.

Improved crop varieties are proposed by research centres and seed agencies to the Variety Release Committee (VRC). The VRC, based on the feasibility and potential of the crop, recommends the proposal and submit the list to the National Seed Board, which eventually and officially adopts and releases the crop variety.

The release of new improved crop varieties has huge potential to increase crop productivity. Hence, programs for introduction and development of new varieties should continue to support the growth of seed industry and ensure sustainable development in agriculture.

We earnestly acknowledge everyone involved for all their support and cooperation in taking out this publication.



(Kinlay Tshering)

**DIRECTOR**

## LIST OF TABLES

Table 1. Number of improved field crops released in Bhutan (1988 – 2021) .....	1
Table 2. Number of improved fruit plants released in Bhutan (1988-2021) .....	1
Table 3. Number of improved plantation crops released in Bhutan (2021).....	2
Table 4. Number of improved vegetables released in Bhutan (1988-2021).....	2
Table 5. Number of de-notified crop varieties .....	3
Table 6. Released field crop varieties in Bhutan (1988-2021) .....	4
Table 7. Released fruit varieties in Bhutan (1988-2021).....	7
Table 8. Released tea varieties in Bhutan (2021) .....	13
Table 8. Released vegetables in Bhutan (1988-2021) .....	14
Table 9. De-notified crop varieties in Bhutan.....	20

**Table 1. Number of improved field crops released in Bhutan (1988 – 2021)**

Field crops	Total varieties released (Nos.)
1. Rice	27
2. Maize	5
3. Wheat	3
4. Finger millet	3
5. Mung bean	2
6. Mustard	5
7. Soybean	4
8. Quinoa	4
<b>Total</b>	<b>53</b>

**Table 2. Number of improved fruit plants released in Bhutan (1988-2021)**

Fruit crops	Total varieties released (Nos.)	Fruit crops	Total varieties released (Nos.)
1. Areca nut	1	18. Mango	8
2. Almond	4	19. Musk melon	1
3. Apple	15 (3 Rootstocks)	20. Passion fruit	1
4. Apricot	3	21. Peach	4
5. Avocado	2	22. Pear	9
6. Banana	4	23. Persimmon	3
7. Cardamom	2	24. Plum	5
8. Cherry	4	25. Pomegranate	2
9. Dragon fruit	1	26. Pineapple	3
10. Gooseberry	1	27. Pecan nut	2
11. Ground apple	1	28. Strawberry	3
12. Grapes	2	29. Walnut	3
13. Guava	2	30. Watermelon	3
14. Kiwi	5	<b>Total</b>	<b>110</b>
15. Lime	1		
16. Litchi	5		
17. Mandarin/Orange	10 (5 Rootstocks)		

**Table 3. Number of improved plantation crops released in Bhutan (2021)**

<b>Plantation crops</b>	<b>Total varieties released (Nos.)</b>
1. Tea	2
2. Coffee	2
<b>Total</b>	<b>4</b>

**Table 4. Number of improved vegetables released in Bhutan (1988-2021)**

<b>Vegetables</b>	<b>Total varieties released (Nos.)</b>	<b>Vegetables</b>	<b>Total varieties released (Nos.)</b>
1. Asparagus	2	18. Cucumber	3
2. Adzuki beans	1	19. Garlic	1
3. Beans	11	20. Japanese green	2
4. Beetroot	1	21. Ladies finger	1
5. Bottle gourd	1	22. Lettuce	5
6. Brinjal (Eggplant)	3	23. Mustard green	6
7. Broccoli	1	24. Parsley	1
8. Bulb onion	5	25. Pea	3
9. Bunching onion	2	26. Potato	4
10. Cabbage	9	27. Pumpkin	4
11. Capsicum	1	28. Radish	8
12. Chilli	4	29. Spinach	2
13. Carrot	5	30. Summer squash	2
14. Cauliflower	8	31. Sweet potato	2
15. Celery	1	32. Tomato	9
16. Chinese cabbage	1	33. Turnip	1
17. Coriander	1	<b>Total</b>	<b>111</b>

**Table 5. Number of de-notified crop varieties**

<b>Vegetables</b>	<b>Varieties (Nos.)</b>	<b>Cereals</b>	<b>Varieties (Nos.)</b>
1. Beans	3	1. Rice	3
2. Bulb onion	2	2. Mustard	1
3. Cabbage	2	3. Wheat	3
4. Carrot	1	4. Maize	2
5. Cauliflower	3	<b>Total</b>	<b>9</b>
6. Celery	1		
7. Chilli	1		
8. Cucumber	1		
9. Ladies finger	2		
10. Lettuce	1		
11. Pea	2		
12. Potato	2		
13. Pumpkin	1		
14. Radish	2		
15. Tomato	2		
16. Welsh onion	1		
<b>Total</b>	<b>27</b>		

  

<b>Fruits</b>	<b>Varieties (Nos.)</b>
1. Watermelon	1
<b>Total</b>	<b>1</b>

**Table 6. Released field crop varieties in Bhutan (1988-2021)**

Variety	Variety/Breeding line (s)	Year of Release	Releasing Committee	Releasing Agency	Yield Potential (t/ac)	Maturity (DAS)	Recommended Agro-ecology (MASL)	Remarks
<b>1. RICE: <i>Oryza sativa</i></b>								
1.1. IR 64	IR 64	1988	1 <sup>st</sup>	RDC- Bajo	2.0-3.2	140-155	600-1500	Released
1.2.No. 11	No 11	1988	1 <sup>st</sup>	RDC- Bajo	1.6-1.4	160	>1500	Released
1.3.BR 153	BR 153	1988	1 <sup>st</sup>	RDC- Bajo	1.2-1.6	140-150	<600	Released
1.4. IR 20913	IR 20913-B-26-1-2-2-3	1989	2 <sup>nd</sup>	RDC- Bajo	1.6-2.4	130-140	600-1500	Released
1.5. Khangma Maap	Chumro	1999	8 <sup>th</sup>	RDC-Wengkhar	1.6-2.4	120-130	>1500	Released
1.6. Bajo Maap 1	CARD21-10-1-1-3-2-1	1999	8 <sup>th</sup>	RDC-Bajo	2.0-3.2	150-155	600-1500	Released
1.7. Bajo Maap 2	CARD21-14-1-1-3-2-1B	1999	8 <sup>th</sup>	RDC-Bajo	2.0-3.0	145-155	600-1500	Released
1.8. Bajo Kaap 1	IR61331-2-148-B	1999	8 <sup>th</sup>	RDC-Bajo	2.0-3.4	145-155	600-1500	Released
1.9. Bajo Kaap 2	IR61328-1-136-2-1-2-3	1999	8 <sup>th</sup>	RDC-Bajo	2.0-3.4	150-165	600-1500	Released
1.10. Khangma Ray Kaap 2	Khumal 2	2002	9 <sup>th</sup>	RDC-Wengkhar	2.0-3.0	160-165	600-1500	Released
1.11. Yusi Ray Maap	Suwon 359/IR41996-118-2-13/Thimphu Maap	2002	9 <sup>th</sup>	RDC-Yusipang	2.5-3.5	140-160	>1800	Released
1.12. Yusi Ray Kaap	YR3825-11-3-2-1/YR3825-11-3-2-1/Barket	2002	9 <sup>th</sup>	RDC-Yusipang	2.5-3.5	140-160	>1800	Released
1.13. Wengkhar Ray Kaap 6	Khumal 6	2006	11 <sup>th</sup>	RDC-Wengkhar	2.0-3.0	160-165	600-1500	Released
1.14. Jakar Ray Naap	Paro china	2006	11 <sup>th</sup>	RC-Jakar	1.5-2.0	140-160	>2600	Released
1.15. Yusi Ray Kaap 2	YP5-34-16 Akiyutaka/Naam	2010	13 <sup>th</sup>	RDC-Yusipang	2.0-4.0	132	> 1800	Released
1.16. Yusi Ray Maap 2	YP6-35-21 Akiyutaka/Ray Maap	2010	13 <sup>th</sup>	RDC-Yusipang	2.0-3.0	134	>1800	Released
1.17. Wengkhar Ray Kaap10	OR 367-SP 11	2010	13 <sup>th</sup>	RDC-Wengkhar	1.0-2.0	130-140	<700	Released
1.18. Bhur Ray Kaap 1	IR 72102-3-115-1-3-2	2010	13 <sup>th</sup>	RDC-Samtenling	2.0-3.0	155-160	<700	Released
1.19. Bhur Ray Kaap 2	KARJAT 3	2010	13 <sup>th</sup>	RDC-Samtenling	1.0-2.0	135-140	<700	Released
1.20. Bhur Kambja 1	APO	2010	13 <sup>th</sup>	RDC-Samtenling	1.0-1.5	125-130	<700	Released
1.21. Bhur Kambja 2	IR 70181-5-PM1-1-2-B-1	2010	13 <sup>th</sup>	RDC-Samtenling	1.0-1.5	140-145	<700	Released
1.22. Wengkhar Kambja 1	Machapuchray 3	2017	19 <sup>th</sup>	RDC-Wengkhar	1.0-3.0	180	1500-2000	Released
1.23. Wengkhar Kambja 2	Zangthi 2	2017	19 <sup>th</sup>	RDC-Wengkhar	1.0-2.0	175	1500-2000	Released



1.24. Sokha Rey 1	BRRI Dhan 28	2019	20 <sup>th</sup>	RDC-Yusipang	2.25		200-800	Released
1.25. Yusirey Kaap 3	YPS-7	2019	20 <sup>th</sup>	RDC-Yusipang	3.46		1800	Released
1.26. Yusirey Kathra-Mathra Rey	PP4 (38-4)	2019	20 <sup>th</sup>	RDC-Yusipang	3.78		1800	Released
1.27. Bajo Kaap 3	TME-80518	2021	23 <sup>rd</sup>	ARDC-Bajo	2-2.2	150-155	800-1500	Released

## 2. MAIZE: *Zea mays*

2.1. Yangtsipa	Suwon 1	1992	5 <sup>th</sup>	RDC-Wengkhar	1.2-1.6	120-130	<1800	Released
2.2. Chaskharpa	SO3TLYQAB05 (Entry 35)	2012	15 <sup>th</sup>	RDC-Wengkhar	2.75	170-180	1200-1800	Released
2.3. Shaphangma	ICA V 305 (Entry No. 38)	2012	15 <sup>th</sup>	RDC-Wengkhar	2.81	180-185	>1800	Released
2.4. Bhur Ashom 1	Arun 4	2015	18 <sup>th</sup>	RDC-Samtenling	1.30	90-100	<1200	Released
2.5. Wengkhar HTM 1	HTMA ZH111755 Hybrid	2020	22 <sup>th</sup>	RDC-Wengkhar	1.9	100-120	<900	Released

## 3. WHEAT: *Triticum aestivum*

3.1. Gumasokha Kaa	Agrim	2014	17 <sup>th</sup>	RDC-Bajo	1.2-1.3	150-160	1400	Released
3.2. Bajosokha Kaa	Baj	2014	17 <sup>th</sup>	RDC-Bajo	1.3-1.4	155-160	1400	Released
3.3. Bumthang Kaa Drukchu	NL 1064	2015	18 <sup>th</sup>	RDC-Jakar	1.2-1.3	250	1200-2600	Released

## 4. FINGER MILLET: *Eleusine coracana*

4.1. Lingmethang Kongpu 1	3459	2002	9 <sup>th</sup>	RDC-Wengkhar	0.7-0.8	120	300-1700	Released
4.2. Limethang Kongpu 2	5459	2002	9 <sup>th</sup>	RDC-Wengkhar	0.84-0.85	140	300-1700	Released
4.3. Membja – 1	GPU 48	2019	20 <sup>th</sup>	RDC-Samtenling	2.5	110-115	200 - 1000	Released

## 5. MUNGBEAN: *Vigna radiata*

5.1. Limithang Mung 1	KPS 2	2002	9 <sup>th</sup>	RDC-Wengkhar	0.30	120-130	800-1200	Released
5.2. Limithang Mung 2	Bari Mung 2	2002	9 <sup>th</sup>	RDC-Wengkhar	0.30	120-131	800-1200	Released

---

**6. MUSTARD: *Brassica campestris***

6.1. M 27	M 27	1989	2 <sup>nd</sup>	RDC Bajo	0.40	85-90	<2000	Released
6.2. Bajo Peka 1	BSA	1994	7 <sup>th</sup>	RDC Bajo	0.50	145-155	<2000	Released
6.3. Bajo Peka 2	PT 30	1994	7 <sup>th</sup>	RDC Bajo	0.40	120-130	<2000	Released
6.4. Yusi Peka 1	Lumle Tori 1	2017	19 <sup>th</sup>	RDC-Yusipang	0.57	95-100	1500-2600	Released
6.5. Yusi Peka 2	Bari Sharisha 15	2017	19 <sup>th</sup>	RDC-Yusipang	0.53	90-95	300-1400	Released

---

**7. SOYBEAN: *Glycine max***

7.1. One Daughter	One Daughter	1994	7 <sup>th</sup>	DSC	0.8-1.0	150-160	600-2000	Released
7.2. Khangma Libi 2	GC 86018-427-3	2002	9 <sup>th</sup>	RDC-Wengkhar	0.5-1.0	150-160	800-1500	Released
7.3. Brag	Brag	2002	9 <sup>th</sup>	DSC	1.0-2.0	145-160	600-2000	Notified
7.4. Khangma Libi 1	AGS 258	1999	8 <sup>th</sup>	RDC-Wengkhar	1.0-1.5	154-164	600-2000	Released

---

**8. QUINOA: *Chenopodium quinoa***

8.1. Ashi Heychum AM	Amarilla Maragani	2018	20 <sup>th</sup>	RDC-Yusipang	0.75	173	150 - 3600	Released
8.2. Ashi Heychum AS	Amarilla Saccaca	2018	20 <sup>th</sup>	RDC-Yusipang	0.90	170	150 - 3600	Released
8.3. Ashi Heychum Ivory	Ivory 123	2018	20 <sup>th</sup>	RDC-Yusipang	0.90	150	150 - 3600	Released
8.4. Ashi Heychum TW	DoA-1-PMB-2015	2018	20 <sup>th</sup>	RDC-Yusipang	0.75	140	150 - 3600	Released

---

**Table 7. Released fruit varieties in Bhutan (1988-2021)**

Variety	Variety/Breeding line (s)	Year of Release	Releasing Committee	Releasing Agency	Yield Potential (t/ac or kg/tree)	Maturity / Harvesting Time	Recommended Agro-ecology (MASL)	Remarks
<b>1. ARECA-NUT: <i>Areca catechu</i></b>								
1.1. Bhur selection	Bhur Selection	2004	10 <sup>th</sup>	DSC	3.0-5.0	Dec-March	<1000	Notified
<b>2. ALMOND: <i>Prunus dulcis</i></b>								
2.1. Texas	Texas	2004	10 <sup>th</sup>	RDC-Bajo	0.12 kg/tree	Mid-August	1300-2000	Released
2.2. Drake	Drake	2004	10 <sup>th</sup>	RDC-Bajo	0.45 kg/tree	August-September	1300-2000	Released
2.3. Dhebhar Badhan	Dhebhar Badhan	2004	10 <sup>th</sup>	RDC-Bajo	2.5 kg/tree	August-September	1300-2000	Released
2.4. Kagzi	Kagzi	2004	10 <sup>th</sup>	RDC-Bajo	1.6 kg/tree	Early August	1300-2500	Released
<b>3. APPLE: <i>Malus domestica</i></b>								
3.1. Red Delicious	Red Delicious	1994	7 <sup>th</sup>	RDC-Yusipang	7.00	Sept-October	2000-2800	Released
3.2. Royal Delicious	Royal Delicious	1994	7 <sup>th</sup>	RDC-Yusipang	7.00	Sept-October	2000-2800	Released
3.3. Golden Delicious	Golden Delicious	1994	7 <sup>th</sup>	RDC-Yusipang	3.70	Sept-October	2000-2800	Released
3.4. Jonathan	Jonathan	1994	7 <sup>th</sup>	RDC-Yusipang	5.00	October	2000-2800	Released
3.5. Rich Red	Rich Red	1994	7 <sup>th</sup>	RDC-Jakar	3.50	August-Sept	2000-2800	Released
3.6. Lobo	Lobo	2002	9 <sup>th</sup>	RDC-Jakar	3.20	Late September	2000-2800	Released
3.7. Red Chief	Red chief	2004	10 <sup>th</sup>	RDC-Yusipang	2.0-3.0	Sept-October	2000-2500	Released
3.8. Red Free	Red Free	2004	10 <sup>th</sup>	RDC-Yusipang	3.80	Mid-August	2000-2500	Released
3.9. Bajo Apple	Anna	2002	9 <sup>th</sup>	RDC-Bajo	2.50	Mid July	1000-1500	Released
3.10. Fuji	Fuji	2007	12 <sup>th</sup>	DSC	5.0-7.0	October	2000-2500	Notified
3.11. Mutsu	Mutsu	2007	12 <sup>th</sup>	DSC	5.0-7.0	Early October	2000-2500	Notified
3.12. MM 9	MM 9	2006	11 <sup>th</sup>	DSC	Rootstock	Rootstock	>2000	Released
3.13. MM 111	MM 111	2006	11 <sup>th</sup>	DSC	Rootstock	Rootstock	>1200	Released
3.14. MM 106	MM 106	1994	7 <sup>th</sup>	RDC-Yusipang	Rootstock	Rootstock	>2000	Released
3.15. Shekhaichi	Shekhaichi	2018	20 <sup>th</sup>	NSC	5.0-7.0	Sept-October	>2000	Notified

<b>4. APRICOT: <i>Prunus armeniaca</i></b>								
4.1. Bajo Khamchung 1	Newcastle	2002	9 <sup>th</sup>	RDC-Bajo	2.5-4.8	Mid May	!200-2000	Released
4.2. Shakapara	Shakapara	2002	9 <sup>th</sup>	DSC	3.0-4.0	May	<1800	Notified
4.3. Bajokham-2	July Elberta	2004	10 <sup>th</sup>	RDC-Bajo	3.0-4.0	July	1200-2500	Released
<b>5. AVOCADO: <i>Persea americana</i></b>								
5.1. Bajo-Gule-1	Bacon	2012	15 <sup>th</sup>	RDC- Bajo	125 kg/tree	October	300-1500	Released
5.2. Bajo-Gule-2	Haas	2012	15 <sup>th</sup>	RDC- Bajo	53 kg/tree	Sept-October	300-1500	Released
<b>6. BANANA: <i>Musa spp.</i></b>								
6.1. Jaji	Jaji	2002	9 <sup>th</sup>	DSC	5.0-7.0	Sept-April	<1500	Notified
6.2. Gheukola	Gheukola	2002	9 <sup>th</sup>	DSC	5.0-7.0	Sept-April	<1500	Notified
6.3. Chinichampa	Chinichampa	2002	9 <sup>th</sup>	DSC	3.0-5.0	Sept-April	<1500	Notified
6.4. Samtenling Ngangla 1	Grand Naine	2020	22 <sup>nd</sup>	RDC-Samtenling	3592 hands		<1500	Released
<b>7. CARDAMOM: <i>Amomum subulatum</i></b>								
7.1. Bharlangey	Bharlangey	2002	9 <sup>th</sup>	RDC-Jakar	0.25-0.35	October-Nov	900-1600	Released
7.2. Golsey	Golsey	2002	9 <sup>th</sup>	RDC-Jakar	0.25-0.35	Sept- October	900-1200	Released
<b>8 CHERRY: <i>Prunus avium</i></b>								
8.1. Seneca	Seneca	2002	9 <sup>th</sup>	DSC	0.9-1.0	May	1600-2600	Notified
8.2. Royal Ann	Royal Ann	2002	9 <sup>th</sup>	DSC	0.9-1.0	May	1600-2600	Notified
8.3. Jabouney	Jabouney	2002	9 <sup>th</sup>	DSC	1.0-1.72	June	1600-2600	Notified
8.4. Seokham Drukchu	Stella	2015	18 <sup>th</sup>	RDC-Yusipang	1.0-1.02	July	1600-2600	Released
<b>9. DRAGON FRUIT: <i>Hylocereus undatus</i></b>								
9.1. Gewaringpa 1	<i>Hylocereus undatus</i>	2017	19 <sup>th</sup>	RDC-Wengkhar	20 kg/tree	July-October	300-1500	Released
<b>10. GOOSEBERRY: <i>Ribesuva crisper</i></b>								
10.1. Bajo Amla	Chakiya	2010	13 <sup>th</sup>	RDC-Bajo	NA	October	400-1500	Notified
<b>11 GRAPES: <i>Vitis vinifera</i></b>								
11.1. Muscate of Alexandria	Muscate of Alexandria	2004	10 <sup>th</sup>	RDC-Bajo	3.00	August	500-1800	Released
11.2. Perlette	Perlette	2004	10 <sup>th</sup>	RDC-Bajo	1.00	June	500-1800	Released

**12. GROUND APPLE: *Smallanthus sonchifolius***

12.1. Yacon	Yusi Yacon-1	2019	21 <sup>st</sup>	RDC-Yusipang	6.2kg/plant	Jan-February	900-2500	Released
-------------	--------------	------	------------------	--------------	-------------	--------------	----------	----------

**13. GUAVA: *Psidium guajava***

13.1. Bebsew Shakha	Pink Flesh	2010	13 <sup>th</sup>	RDC-Bajo	15-20 kg/tree	May-October	250 - 1300	Released
13.2. Bajo Bebsew	Local	2010	13 <sup>th</sup>	RDC-Bajo	10-15 kg/tree	May-October	250 - 1300	Released

**14. KIWI: *Actinidia deliciosa***

14.1. Zhimpeykotong Sep	Yellow Joy	2015	18 <sup>th</sup>	RDC-Wengkhar	4.0-6.0	October	1200-2300	Released
14.2. Zhimpeykotong Jangkha	Wengkhar Green	2015	18 <sup>th</sup>	RDC-Wengkhar	4.0-6.0	Oct-November	1200-2300	Released
14.3. Zhimpeykotong Phosing	Male_plant	2015	18 <sup>th</sup>	RDC-Wengkhar	Male plant	Male plant	1200-2300	Released
14.4. Enza Red	Enza Red	2019	21 <sup>st</sup>	RDC-Wengkhar	5 to 18 kg/tree	Oct-November	1200	Released
14.5. Hayward	Hayward	2019	21 <sup>st</sup>	RDC-Wengkhar	5 to 18 kg/tree	Oct-November	1200	Released

**15. LIME: *Citrus latifolia***

15.1. Bearrs	Swingle	2004	10 <sup>th</sup>	RDC-Bajo	1.0-2.0	Aug-January	500-1500	Released
--------------	---------	------	------------------	----------	---------	-------------	----------	----------

**16. LITCHI: *Litchi chinensis***

16.1. Bhur Selection 1	Bhur Selection 1	2004	10 <sup>th</sup>	DSC	9.0-10.0	June-July	<1200	Notified
16.2. Shahi	Shahi	2006	11 <sup>th</sup>	DSC	10.0-12.0	Late June	<1200	Notified
16.3. Early Bedana	Early Bedana	2006	11 <sup>th</sup>	DSC	8.0-9.0	Early June	<1200	Notified
16.4. Bhur Litchi 1	Muzaffarpur	2012	15 <sup>th</sup>	RDC-Samtenling	70 kg/tree	February-May	200-700	Released
16.5. Bhur Litchi 2	Bedana	2012	15 <sup>th</sup>	RDC-Samtenling	65 kg/tree	February-May	200-700	Released

**17. MANDARIN/ORANGE: *Citrus reticulata***

17.1. Dorokha Selection	Dorokha Selection	2004	10 <sup>th</sup>	DSC	4.0-5.0	Oct-December	700-1700	Notified
17.2. Wengkhar Tshelu 1	Wengkhar Tshelu 1	2007	12 <sup>th</sup>	RDC-Wengkhar	35 kg/tree	Mid November	1300-1700	Released
17.3. Wengkhar Tshelu 2	Wengkhar Tshelu 2	2007	12 <sup>th</sup>	RDC-Wengkhar	27 kg/tree	Mid November	1300-1700	Released
17.4. Wengkhar Tselu Drukchu	Clemintina Nules	2015	18 <sup>th</sup>	RDC-Wengkhar	37 kg/tree	December	1200-1500	Released
17.5. Wengkhar Tshelu Ngarm	Tarku	2015	18 <sup>th</sup>	RDC-Wengkhar	41 kg/tree	January	800-1300	Released

**Mandarin Rootstock**

17.6. Rangpur Lime	Rangpur Lime	2004	10 <sup>th</sup>	RDC-Wengkhar	Rootstock	Rootstock	800-1200	Released
17.7. Wengkhar Tshelu Rato 1	Trifoliate orange	2006	11 <sup>th</sup>	RDC-Wengkhar	Rootstock	Rootstock	800-1600	Released
17.8. Carrizo citrange	Carrizo citrange	2006	11 <sup>th</sup>	DSC	Rootstock	Rootstock	800-1800	Released
17.9. Troyer citrange	Troyer citrange	2006	11 <sup>th</sup>	DSC	Rootstock	Rootstock	800-1800	Released
17.10. Cleopatra mandarin	Cleopatra mandarin	2006	11 <sup>th</sup>	DSC	Rootstock	Rootstock	800-1800	Released

**18. MANGO: *Mangifera indica***

18.1. Chausa	Chausa	2002	9 <sup>th</sup>	DSC	4.0-6.0	August	<1500	Notified
18.2. Bajo Aumchukuli 1	Dashahari	2010	13 <sup>th</sup>	RDC-Bajo	3.0-4.0	July-August	280-800	Released
18.3. Bajo Aumchukuli 2	Langra	2010	13 <sup>th</sup>	RDC-Bajo	12-15 kg/tree	Mid March-August	250-800	Released
18.4. Bajo Aumchukuli 3	Amrapali	2010	13 <sup>th</sup>	RDC-Bajo	12-15 kg/tree	Late July	250-800	Released
18.5. Samtenling Amchukuli-1	Chinwang	2019	21 <sup>st</sup>	RDC-Samtenling	81.35kg/tree	July	150-1100	Released
18.6. Samtenling Amchukuli-2	Duncan	2019	21 <sup>st</sup>	RDC-Samtenling	69.03kg/tree	July	150-1100	Released
18.7. Samtenling Amchukuli-3	Irwin	2019	21 <sup>st</sup>	RDC-Samtenling	24.96kg/tree	July	150-1200	Released
18.8. Samtenling Amchukuli-4	Tommy Atkin	2019	21 <sup>st</sup>	RDC-Samtenling	60.31kg/tree	July	150-1100	Released

**19. MUSKMELON: *Cucumis melo***

19.1. Honey Dew	Honey Dew	1990	3 <sup>rd</sup>	RDC-Bajo	2.0-4.0	90-110 DAS	600-1500	Released
-----------------	-----------	------	-----------------	----------	---------	------------	----------	----------

**20. PASSION FRUIT: *Passiflora edulis***

20.1. Local	Local	2004	10 <sup>th</sup>	DSC	1.0-2.0	May-June	<1500	Notified
-------------	-------	------	------------------	-----	---------	----------	-------	----------

**21. PEACH: *Prunus persica***

21.1. Bajokham 1	Flordasum	2002	9 <sup>th</sup>	RDC-Bajo	3.0-4.0	Mid May	1000-2000	Released
21.2. Nonomiwase	Nonomiwase	2002	9 <sup>th</sup>	DSC	5.9-8.0	June-July	>1500	Notified
21.3. Bajokham 2	July Elberta	2004	10 <sup>th</sup>	RDC-Bajo	2.9-3.7	July	1200-2500	Released
21.4. Bathpala Super	Bathpala Super	2004	10 <sup>th</sup>	RDC-Jakar	4.0-6.0	July-August	2000-2600	Released

**22. PECAN NUT: *Carya illinoensis***

22.1. Bajo Thasa Taago-1	Western Schley	2019	21 <sup>st</sup>	RDC-Bajo	8 Kg/tree	Oct-November	900-1700	Released
22.2. Bajo Thasa Taago-2	Whichita	2019	21 <sup>st</sup>	RDC-Bajo	10 kg/tree	Oct-November	900-1700	Released

---

**23. PEAR: *Pyrus communis***

23.1. Hosui	Hosui	2002	9 <sup>th</sup>	DSC	6.0-7.0	Mid August	1500-2200	Notified
23.2. Kosui	Kosui	2002	9 <sup>th</sup>	DSC	5.0-6.0	July-Early August	1500-2000	Notified
23.3. Bajo Lhee 1	Flemish beauty	2004	10 <sup>th</sup>	RDC-Bajo	2.0-3.0	August	1300-2500	Released
23.4. Zhey Lhee	Zhey Lhee	2004	10 <sup>th</sup>	RDC-Jakar	4.8-5.5	Early October	<2000	Notified
23.5. Wengkhar Lhee 1	Chojuro	2010	13 <sup>th</sup>	RDC-Wengkhar	10.00	August	1500 to 2200	Released
23.6. Wengkhar Lhee 2	Shinko	2012	15 <sup>th</sup>	RDC-Wengkhar	59 kg/tree	August end	1500 to 2200	Released
23.7. Yusipang Lhee-1	Niitaka	2018	20 <sup>th</sup>	RDC-Samtenling	39 kg/tree	August	1700 - 2600	Released
23.8. Yusipang Lhee-2	Hakuri	2018	20 <sup>th</sup>	RDC-Samtenling	39.05 kg/tree	August	1700 - 2600	Released
23.9. William	William	2018	20 <sup>th</sup>	NSC	35 kg/tree	August	1700 - 2500	Notified

---

**24. PERSIMMON: *Diospyros kaki***

24.1. Fuyu	Fuyu	2004	10 <sup>th</sup>	DSC	3.0-4.0	Mid November	1000-1650	Notified
24.2. Jiro	Jiro	2004	10 <sup>th</sup>	DSC	3.0-4.0	Early October	1000-1650	Notified
24.3. Wengkhar Anday 1	Wengkhar Anday 1	2007	12 <sup>th</sup>	RDC-Wengkhar	2.0-3.0	Mid-September	1500-2300	Released

---

**25. PLUM: *Prunus domestica***

25.1. Santa Rosa	Santa Rosa	2002	9 <sup>th</sup>	DSC	3.0-5.0	May-June	>1700	Notified
25.2. Oishiwase	Oishiwase	2002	9 <sup>th</sup>	DSC	5.0-6.0	May-June	>1700	Notified
25.3. Jambay Lhaxhang Chuli	Jambay Lhaxhang Chuli	2004	10 <sup>th</sup>	RDC-Jakar	4.0-5.0	July-August	2000-2600	Notified
25.4. Soldum	Soldum	2012	15 <sup>th</sup>	RDC-Wengkhar	45 kg/tree	Last week of June	1600-2500	Released
25.5. Yusi Prune 1	Stanley	2020	22 <sup>nd</sup>	RDC-Yusipang	5.0-6.5	Mid Sept-October	>1700	Released

---

**26. POMEGRANATE: *Punica granatum***

26.1. Bedana	Bedana	2004	10 <sup>th</sup>	DSC	2.5-4.0	Late August	<1500	Notified
26.2. Bajo Seindu 1	Khandari	2010	13 <sup>th</sup>	RDC-Bajo	26.7 kg/tree	April-August	400-1500	Released

---

**27. PINEAPPLE: *Ananas comosus***

27.1. Spineless	Spineless	2018	20 <sup>th</sup>	RDC-Wengkhar	19 kg/tree	July-August	1500	Notified
27.2. Samtenling kongtsey 1		2020	22 <sup>nd</sup>	RDC-Yusipang	19.4	August	<1500	Released
27.3. Samtenling kongtsey 2		2020	22 <sup>nd</sup>	RDC-Yusipang	6.8	June-July	<1500	Released

---

---

**28. STRAWBERRY: *Fragaria ananassa***

28.1. Yusi Sagong 1	Chandler	2006	11 <sup>th</sup>	RDC-Yusipang	0.7	May-June	1500-2500	Released
28.2. Pangtshalu Ngarm	Sweet Charlie	2014	17 <sup>th</sup>	RDC-Yusipang	1.37	May	1800-2600	Released
28.3. Pangtshalu Maap	Camarosa	2014	17 <sup>th</sup>	RDC-Yusipang	0.63	June	1800-2600	Released

---

**29. WALNUT: *Juglans regia***

29.1. Kagzi	Kagzi	2002	9 <sup>th</sup>	DSC	0.5-1.5	Sept – October	1400-2800	Notified
29.2. Kanthel	Kanthel	2004	10 <sup>th</sup>	RDC-Yusipang	1.0-1.5	September	1400-2800	Released
29.3. Yusipang 2	Yusipang 2	2004	10 <sup>th</sup>	RDC-Yusipang	0.5-1.0	September	1400-2800	Released

---

**30. WATERMELON: *Citrullus lanatus***

30.1. Sugar Baby	Sugar Baby	2018	20 <sup>th</sup>	NSC	15-20	75 DAS	<1500	Notified
30.2. Bajo Kharimuza 1	Blackball	2021	23 <sup>rd</sup>	ARDC-Bajo	24-33	80-120 DAS	<1400	Released
30.3. Bajo Kharimuza 2	Kabuki	2021	23 <sup>rd</sup>	ARDC-Bajo	25-29	80-120 DAS	<1400	Released

---



**Table 8. Released tea varieties in Bhutan (2021)**

Variety	Variety/Breeding line (s)	Year of Release	Releasing Committee	Releasing Agency	Yield Potential (t/ac or kg/tree)	Maturity / Harvesting Time	Recommended Agro-ecology (MASL)	Remarks
<b>1. Tea: <i>Camellia Sinensis</i></b>								
1.1. Sam Ja 1	Samcholing Indigenous	2020	22 <sup>nd</sup>	RDC-Samtenling	0.54	March-Oct	150-1800	Released
1.2. Sam Ja 2	Prince Namgay Wangchuck	2020	22 <sup>nd</sup>	RDC-Samtenling	0.58	March-Oct	150-1800	Released
<b>2. Coffee: <i>Coffea Arabica</i> &amp; <i>Coffea robusta</i></b>								
2.1. Samtenling Arabica 1	Arabica coffee	2021	23 <sup>rd</sup>	ARDC-Samtenling	1.50	Oct.-Nov.	600-1200	Released
2.2. Samtenling Robusta 1	Robusta coffee	2021	23 <sup>rd</sup>	ARDC-Samtenling	2.10	Jan-Feb.	<600	Released

**Table 8. Released vegetables in Bhutan (1988-2021)**

Variety	Variety/Breeding line (s)	Year of release	Releasing Committee	Releasing Agency	Yield Potential (t/ac)	Maturity (DAS)	Recommended Agro-ecology (MASL)	Remarks
<b>1. ASPARAGUS: <i>Asparagus officinalis</i></b>								
1.1. Merry Washington	Merry Washington	2002	9 <sup>th</sup>	DSC	1.1-1.5	3 years	1000-2500	Notified
1.2. UC-157	UC-157 (Hybrid)	2006	11 <sup>th</sup>	DSC	1.0-2.0	2-3 years	1000-2600	Released
<b>2. ADZUKI BEANS: <i>Vigna angularis</i></b>								
2.1. Yusi Adzuki 1	Erimo Adzuki beans	2021	23 <sup>rd</sup>	NCOA-Yusipang	0.6-1.2	100-120	600-2700	Released
<b>3. BEANS: <i>Phaseolus vulgaris</i></b>								
3.1. Borloto	Borloto	1990	3 <sup>rd</sup>	RDC-Bajo	2.0-4.0	65-70	<1500	Released
3.2. Pusa parvati	Pusa parvati	1990	3 <sup>rd</sup>	RDC-Bajo	2.5-3.5	50-60	<1500	Released
3.3. Top Crop	Top Crop	1990	3 <sup>rd</sup>	RDC-Bajo	1.0-2.0	70-85	<1500	Released
3.4. Rajma	Rajma	1994	7 <sup>th</sup>	RDC-Bajo	2.50	80-90	700-2000	Released
3.5. Green arrow	Green arrow	1999	8 <sup>th</sup>	RDC-Bajo	2.00	60	700-2000	Released
3.6. Lingmethang Mung 1	KPS2	2002	9 <sup>th</sup>	RDC-Wengkhar	0.30	120-130	800-1200	Released
3.7. Lingmethang Mung 2	Barimung	2002	9 <sup>th</sup>	RDC-Wengkhar	0.30	120-130	800-1200	Released
3.8. White No. 1	White No 1	2004	10 <sup>th</sup>	RDC-Bajo	1.5-2.5	70-80	700-1500	Notified
3.9. Selection 9	Selection 9	2004	10 <sup>th</sup>	RDC-Bajo	1.5-3.0	70-80	<2200	Notified
3.10. Wengkhar Semchu 1	Grey pole	2019	21 <sup>st</sup>	RDC-Wengkhar	3.4	70-80	<2400	Released
3.11. Bajo Semchum 1-P	Prime Green	2020	22 <sup>nd</sup>	RDC-Bajo	7.3	50-55	<3000	Released
<b>4. BEETROOT: <i>Beta vulgaris</i></b>								
4.1. DDR	DDR	2004	10 <sup>th</sup>	DSC	4.0-5.0	70-80	<2500	Notified
<b>5. BOTTLE GOURD: <i>Lagenaria siceraria</i></b>								
5.1. Mindapur round	Mindapur round	1999	8 <sup>th</sup>	RDC-Bajo	6.0-7.0	85-95	<1500	Released

<b>6. BRINJAL:</b> <i>Solanum melongena</i>								
6.1. Paro Local	Paro Local	1990	3 <sup>rd</sup>	NASEPP	1.0-2.0	90-100	<2600	Released
6.2. Big Round	Big Round	1990	3 <sup>rd</sup>	NASEPP	2.0-4.0	75-90	600-1500	Released
6.3. Pusa Purple Long	Pusa Purple Long	1990	3 <sup>rd</sup>	RDC-Bajo	2.0-3.0	90-110	600-1500	Released
<b>7. BROCCOLI:</b> <i>Brassica oleracea</i>								
7.1. Dessico	Dessico	1994	7 <sup>th</sup>	RDC-Bajo	0.8-1.0	100-110	600-2600	Released
<b>8. BULB ONION:</b> <i>Allium cepa</i>								
8.1. Senshu Red	Senshu Red	1994	7 <sup>th</sup>	NASEPP	7.00	120-170	<2600	Released
8.2. White Creole	White Creole	2002	9 <sup>th</sup>	DSC	5.0-7.0	120-160	<2600	Released
8.3. Bombay Red	Bombay Red	2002	9 <sup>th</sup>	DSC	4.0-6.0	110-160	<2200	Notified
8.4. Bajo Gop 1	Red Creole	2002	9 <sup>th</sup>	RDC-Bajo	7.0-8.0	120-140	<2200	Released
8.5. Pune Red	Pune Red	2018	20 <sup>th</sup>	NSC	4.0-6.0	110-120	<1800	Notified
<b>9. BUNCHING ONION:</b> <i>Allium fistulosum</i>								
9.1. No. 21	No. 21	2002	9 <sup>th</sup>	DSC	1.0-3.0	80-90	<2600	Notified
9.2. No. 22	No. 22	2002	9 <sup>th</sup>	DSC	1.0-3.0	80-90	<2600	Notified
<b>10. CABBAGE:</b> <i>Brassica oleracea (capitata)</i>								
10.1. Copenhagen Market	Copenhagen Market	1990	3 <sup>rd</sup>	RDC-Bajo	9.0-10.0	75-85	<2600	Released
10.2. Golden Acre	Golden Acre	1990	3 <sup>rd</sup>	RDC-Bajo	9.0-10.0	75-85	<2600	Released
10.3. Green Coronate	Green Coronate (Hybrid)	2006	11 <sup>th</sup>	DSC	12.0-13.0	80-90	Across all AEZ	Released
10.4. Gianty	Gianty (Hybrid)	2006	11 <sup>th</sup>	DSC	11.0-12.0	70-80	Across all AEZ	Released
10.5. T1-163	T1-163 (Hybrid)	2006	11 <sup>th</sup>	DSC	10.0-11.0	65-75	Across all AEZ	Released
10.6. Bonday Cross	Bonday Cross (Hybrid)	2006	11 <sup>th</sup>	DSC	10.0-11.0	90-110	Across all AEZ	Released
10.7. Lucky Ball	Lucky Ball	2007	12 <sup>th</sup>	DSC	9.0-10.0	80-100	Across all AEZ	Released
10.8. Asha	Asha	2019	21 <sup>st</sup>	RDC-Wengkhar	7.6	70-80	1800-2100	Notified
10.9. Bengal King	Bengal king	2019	21 <sup>st</sup>	RDC-Wengkhar	11.4	70-80	1800-2100	Notified

<b>11. CAPSICUM: <i>Capsicum annuum</i></b>								
11.1. California Wonder	California Wonder	1990	3 <sup>rd</sup>	RDC-Bajo	4.0-5.0	75-80	700-2000	Released
<b>12. CHILLI: <i>Capsicum annuum</i></b>								
12.1. Sha Ema	Sha Ema	1990	3 <sup>rd</sup>	DSC	15.0-20.0	90-100	600-2000	Released
12.2. Super Solo	Super solo	2004	10 <sup>th</sup>	RDC-Wengkhar	19.00	90-100	700 to 2500	Released
12.3. Yangtse Ema	Yangtse Ema	2007	12 <sup>th</sup>	RDC-Wengkhar	4.0-6.0	90-100	1000-2000	Released
12.4. Indian Chilli	IR-8	2018	20 <sup>th</sup>	NSC		100-120	1000-1500	Notified
<b>13. CARROT: <i>Daucus carota</i></b>								
13.1. Early Nantes	Early Nantes	1990	3 <sup>rd</sup>	RDC-Bajo	4.0-6.0	80-90	600-2600	Released
13.2. Nisa	Nisa	2002	9 <sup>th</sup>	DSC	4.0-6.0	90-100	<2000	Notified
13.3. Wengkhar Lhaphu Maap	Khuruda 5	2006	11 <sup>th</sup>	RDC-Wengkhar	14.00	105	600 to 2500	Released
13.4. New Khuruda	New Khuruda	2006	11 <sup>th</sup>	DSC	8.0-9.0	100-110	<2000	Released
13.5. All Seasons Cross	All Seasons Cross	2006	11 <sup>th</sup>	DSC	8.9-10.0	110-120	<2200	Released
<b>14. CAULIFLOWER: <i>Brassica oleracea</i></b>								
14.1. White Top	White Top	1990	3 <sup>rd</sup>	RDC-Bajo	10.0-15.0	100	1000-2600	Released
14.2. White Summer	White Summer	1990	3 <sup>rd</sup>	RDC-Bajo	10.0-12.0	90-100	1500-2000	Released
14.3. Wengkhar Metokopi 1	Wengkhar Early	2004	10 <sup>th</sup>	RDC-Wengkhar	7.0-8.0	90	600-2500	Released
14.4. Wengkhar Metokopi 2	Wengkhar Late	2004	10 <sup>th</sup>	RDC-Wengkhar	10.0-12.0	120	600-2500	Released
14.5. White Express 50	White Express 50	2019	21 <sup>st</sup>	RDC-Wengkhar	3.3	90	1400-1800	Notified
14.6. Pragati 40	Pragati 40	2019	21 <sup>st</sup>	RDC-Wengkhar	2.5	90	1400-1800	Notified
14.7. Suhasini	Suhasini (hybrid)	2020		RDC-Yusipang	6.0-8.0	80 DAT	<2600	Notified
14.8. Candid Charm	Candid Charm (hybrid)	2020		RDC-Yusipang	6.0-8.0	140-150	<2600	Notified
<b>15. CELERY: <i>Apium graveolens</i></b>								
15.1. Cornel	Cornel	2002	9 <sup>th</sup>	DSC	5.0-6.0	120-160	<2600	Notified

<b>16. CHINESE CABBAGE: <i>Brassica rapa subsp. Pekinensis</i></b>								
16.1. Kyoto 1	Kyoto 1	1990	3 <sup>rd</sup>	RDC-Bajo	12.0-16.0	60-85	1500-2200	Released
<b>17. CUCUMBER: <i>Cucumis sativus</i></b>								
17.1. Shabi Genchu	Shabi Genchu	1990	3 <sup>rd</sup>	NASEPP	1.2-2.0	70-80	<2400	Released
17.2. Bajo Genchu 1	Bajo Genchu 1	1999	3 <sup>rd</sup>	RDC-Bajo	2.0-4.0	70-85	<2000	Released
17.3. Santon No 1	Santon No 1	2018	20 <sup>th</sup>	NSC	2.0-4.0	70-80	<2500	Notified
<b>18. CORIANDER: <i>Coriandrum sativum</i> L</b>								
18.1. Local	Local	2018	20 <sup>th</sup>	NSC	.04-0.6	80-90	AEZ	Notified
<b>19. GARLIC: <i>Allium sativum</i></b>								
19.1. Local Selection	Local Selection	1990	3 <sup>rd</sup>	NASEPP	4.0-6.0	230-250	<2000	Released
<b>20. JAPANESE GREEN: <i>Brassica spp.</i></b>								
20.1. Taisai	Taisai	1990	3 <sup>rd</sup>	NASEPP/DSC	3.0-4.0	40-50	<2600	Released
20.2. Mibuna	Mibuna	1990	3 <sup>rd</sup>	NASEPP/DSC	3.0-4.0	50-60	<2600	Released
<b>21. LADY FINGER: <i>Abelmoschus esculentus</i></b>								
21.1. Kranti	Kranti	2002	9 <sup>th</sup>	DSC	3.0-5.0	70-80	600-1500	Notified
<b>22. LETTUCE: <i>Lactuca sativa</i></b>								
22.1. Great Lake	Great Lake	1990	3 <sup>rd</sup>	NASEPP	3.0-4.0	70-80	<2600	Released
22.2. Hogay Petshey Leedo	Biscia Rosa	2014	17 <sup>th</sup>	RDC-Yusipang	11.84	90-100	Temperate	Released
22.3. Hogay Petshey Thighra	Flashy Trout	2014	17 <sup>th</sup>	RDC-Yusipang	14.8	90-100	Temperate	Released
22.4. Hogay Petshey Hyem	Green Oak Leaf	2014	17 <sup>th</sup>	RDC-Yusipang	7.20	90-100	Temperate	Released
22.5. Hogay Petshey Oro	Blush Butter Oak	2014	17 <sup>th</sup>	RDC-Yusipang	6.80	90-100	Temperate	Released

<b>23. MUSTARD GREEN: <i>Brassica juncea</i></b>								
23.1. Him Beauty	Him Beauty	1990	3 <sup>rd</sup>	NASEPP/DSC	2.5-4.0	50-60	1200-2600	Released
23.2. Takana Red	Takana Red	1990	3 <sup>rd</sup>	NASEPP/DSC	2.0-3.0	50-60	1200-2600	Released
23.3. Taisai	Taisai	1990	3 <sup>rd</sup>	NASEPP	2.0-3.0	60-70	1500-2600	Released
24.4. Neguna	Neguna	1990	3 <sup>rd</sup>	NASEPP	2.0-3.5	60-70	1200-2600	Released
23.5. Wengkhhar Petshey 1	Wengkhhar Peytse 1	2004	10 <sup>th</sup>	RDC Wengkhhar	3.5-4.0	100-120	600-2600	Released
23.6. Wengkhhar Petshey 2	Wengkhhar Peytse 2	2004	10 <sup>th</sup>	RDC Wengkhhar	3.5-4.0	100-120	600-2600	Released
<b>24. PARSLEY: <i>Petroselinum crispum</i></b>								
24.1. Paramount	Paramount	1990	3 <sup>rd</sup>	NASEPP	2.5-3.5	130-160	<2200	Released
<b>25. PEA: <i>Pisum sativum</i></b>								
25.1. Arkel	Arkel	2002	9 <sup>th</sup>	DSC	1.0-2.0	65-75	All AEZ	Notified
25.2. Usui	Usui	2002	9 <sup>th</sup>	DSC	2.0-3.0	90-100	>1800	Notified
25.3. Mr Big	Mr. Big	2018	20 <sup>th</sup>	NSC	3.0-3.5	90-100	>1800	Notified
<b>26. POTATO: <i>Solanum tuberosum</i></b>								
26.1. Desiree	CIP 800048	1988	1 <sup>st</sup>	BNPP	15.0-18.0	90	1000-2000	Released
26.2. Khangma Kewa Kaap	CIP 378015.13	2002	9 <sup>th</sup>	RDC-Wengkhhar	16.0-20.0	100-105	600-2500	Released
26.3. Nasephey Kewa Kaap	CIP-393077.159	2014	17 <sup>th</sup>	National Potato Program	39-45	160-180	Across all AEZ	Released
26.4. Yusi Maap	CIP 392797.22	2017	19 <sup>th</sup>	RDC-Yusipang	11.6-17.2	120-140	Mid-High Altitude	Released
<b>27. PUMPKIN: <i>Cucurbita maxima</i></b>								
27.1. Ramthang Brumsha	Ramthang Brumsha	1990	3 <sup>rd</sup>	NASEPP	2.0-4.0	100-140	<1200	Released
27.2. Tetsu Kabuta	Tetsu Kabuta	1990	3 <sup>rd</sup>	NASEPP	2.0-3.0	90-100	<1500	Released
27.3. Summer Squash	Summer Squash	1994	7 <sup>th</sup>	NASEPP	1.0-2.0	90-100	<2400	Released
27.4. Wengkhhar Kakur	Wengkhhar Kakur	2007	12 <sup>th</sup>	RDC-Wengkhhar	1.0-2.0	90-100	<1700	Released
<b>28. RADISH: <i>Raphanus sativus</i></b>								
28.1. Minowase	Minowase	1990	3 <sup>rd</sup>	NASEPP	8.0-10.0	50-80	<2600	Released
28.2. Spring Tokinashi	Spring Tokinashi	1990	3 <sup>rd</sup>	NASEPP	9.0-10.0	50-60	<2000	Released
28.3. Bajo Laphu 1	Hongkong White	2002	9 <sup>th</sup>	RDC-Bajo	12.0-20.0	45	<1500	Released

28.4. 35 days	35 days	2018	20 <sup>th</sup>	NSC	9.0-10.0	35	<2000	Notified
28.5. YR White Spring	YR White Spring (hybrid)	2020		RDC-Yusipang	7.0-10.0	50-65	<2600	Notified
28.6. Bajo Laphu 2	Akino Irodi	2021	23 <sup>rd</sup>	ARDC-Bajo	21	60-70	<3300	Released
28.7. Bajo Laphu 3	Gensuke	2021	23 <sup>rd</sup>	ARDC-Bajo	24	60-70	<3300	Released
28.8. Bajo Laphu 4	Long foot	2021	23 <sup>rd</sup>	ARDC-Bajo	22	60-70	<3300	Released
<b>29. SPINACH:</b> <i>Spinacia oleracea</i>								
29.1. All Green	All Green	1990	3 <sup>rd</sup>	RDC-Bajo	4.0-10.0	50 -60	<1500	Released
29.2. Leaf Beet	Leaf Beet	2002	9 <sup>th</sup>	DSC	4.0-10.0	50-70	<1800	Notified
<b>30. SUMMER SQUASH:</b> <i>Cucurbita pepo</i>								
30.1. Zucchini	Zucchini Green	1994	7 <sup>th</sup>	NASEPP	6.0-8.0	60-65	<1200	Released
30.2. Bajo Yellow Zucchini	Yellow Zucchini	2021	23 <sup>rd</sup>	ARDC-Bajo	5.4-6.0	55-60	500-2000	Released
<b>31. SWEET POTATO:</b> <i>Ipomoea batatas</i>								
31.1. Bajo Kewa Ngam 1	Beni Azumi	2021	23 <sup>rd</sup>	ARDC-Bajo	6.0-7.0	100-120	<2500	Released
31.2. Bajo Kewa Ngam 2	Orange flesh	2021	23 <sup>rd</sup>	ARDC-Bajo	8.0-9.0	100-120	<2500	Released
<b>32. TOMATO:</b> <i>Solanum lycopersicum</i>								
32.1. Roma	Roma	1990	3 <sup>rd</sup>	RDC-Bajo	4.0-6.0	90-150	<1500	Released
32.2. Nozomi	Nozomi	1990	3 <sup>rd</sup>	RDC-Bajo	4.5-6.0	90-100	1000-2200	Released
32.3. Cherry Tomato	CHT160	1999	3 <sup>rd</sup>	RDC-Bajo	8.0-12.0	60-70	1300-1800	Released
32.4. Bajo Lambenda 1	Rattan	2002	9 <sup>th</sup>	RDC-Bajo	8-12.0	80-100	300-2600	Released
32.5. Cosmic	Cosmic (hybrid)	2020		RDC-Yusipang	25.0-35.0	140	2000-2700	Notified
32.6. Garv	Garv (hybrid)	2020		RDC-Samtenling	30.0-35.0	75 DAT	<1500	Notified
32.7. Bajo Lambenda 2	Red Tommy Toe	2021	23 <sup>rd</sup>	ARDC-Bajo	10-13.3	90-110	<1800	Released
32.8. Bajo Lambenda 3	Master	2021	23 <sup>rd</sup>	ARDC-Bajo	8.2-11.6	90-110	<1800	Released
32.9. Wengkhar Lambenda 1	Srijana selection	2021	23 <sup>rd</sup>	ARDC-Wengkhar	10.0-14.0	120-150	<2000	Released
<b>33. TURNIP:</b> <i>Brassica rapa</i>								
33.1. PTWG	Purple Top White Globe	1990	3 <sup>rd</sup>	NASEPP	8.0-12.0	60-70	>1000	Released

**Table 9. De-notified crop varieties in Bhutan**

Sl. No.	Crop	Variety	Proposing Agency	Released Year	De-notified year
<b>A Cereals</b>					
1	Rice	1.1. Milyang 54	RDC-Bajo	1989	2002
		1.2. Barket	RDC-Bajo	1892	2002
		1.3. BW 293	RDC-Bajo	1990	2010
2	Mustard	2.1. T-9	RDC-Bajo	1989	2002
3	Wheat	3.1. Sonalika	RDC-Bajo	1970	2014
		3.2. Bajo Kaa 1	RDC-Bajo	1991	2015
		3.3. Bajo Kaa 2	RDC-Bajo	1994	2015
4	Maize	4.1. Khangma Ashom 1	RDC-Wengkhar	1999	2015
		4.2. Khangma Ashom 2	RDC-Wengkhar	1999	2015
<b>B Vegetables</b>					
1	Beans	1.1. Brothbone	DSC	1990	2002
		1.2. Kentucky Wonder	DSC	1990	2002
		1.3. Long John	RDC- Bajo	1994	2002
2	Bulb onion	2.1. Senshu Yellow	DSC	1990	2002
		2.2. Nasik Red	DSC	1994	2002
3	Cabbage	3.1. Baldura	RDC-Bajo	1990	2002
		3.2. Pride of India	RDC-Bajo	1990	2002
4	Carrot	4.1. Chantaney Improved	DSC	1990	2002
5	Cauliflower	5.1. Snow Ball 16	DSC	1994	2002
		5.2. Progress	DSC	1994	2002
		5.3. 19907	DSC	2002	2004
6	Celery	6.1. Short Lake	DSC	1990	2002
7	Chilli	7.1. Hot Wax	RDC-Bajo	1990	2002
8	Cucumber	8.1. Shanton No. 1	DSC	1990	2002



9	Lady finger	9.1. Blue Bell	RDC-Bajo	1994	2002
		9.2. Pusa Sawani	RDC-Bajo	1994	2002
10	Lettuce	10.1. Sunny	DSC	1994	2002
11	Pea	11.1. Snow Pea	RDC-Bajo	1990	2002
		11.2. JI 1050	RDC-Bajo	1990	2002
12	Potato	12.1. Kufri Jyoti	RDC-Yusipang	1988	2014
		12.2. Yusi Kaap	RDC-Yusipang	1988	2014
13	Pumpkin	13.1. Utsuki red	DSC	1990	2002
14	Radish	14.1. Mihaysiga	DSC	1990	2002
		14.2. Shogum	DSC	1990	2002
15	Tomato	15.1. Fusa 3	DSC	1990	2002
		15.2. Helfrush	DSC	1990	2002
16	Welsh onion	16.1. Kujo	DSC	1990	2002
<b>C</b>	<b>Fruits</b>				
1	Water melon	1.1. Asahi Yamato	DSC	1990	2002