

2013

POTATO SEED CATALOGUE

KENYA



**National Potato
Council of Kenya**

syngenta foundation
for sustainable
agriculture

TABLE OF CONTENTS

NATIONAL POTATO COUNCIL OF KENYA	2
FOREWORD	2
HOW TO USE THIS CATALOGUE	0
How to find the variety you want	0
Agricultural characteristics	0
Plant characteristics	1
CERTIFIED SEED PRODUCTION IN KENYA.....	2
TIGONI.....	5
ASANTE	7
DUTCH ROBJIN	8
KENYA MAVUNO	9
KENYA KARIBU	11
KENYA SHEREKEA	13
PURPLE GOLD	15
KENYA SIFA.....	16
KENYA MPYA	17
KERR'S PINK.....	18
DESIREE	19
KENYA BARAKA	20
ANNET	21

NATIONAL POTATO COUNCIL OF KENYA

National Potato Council of Kenya (NPCK) is a multi-stakeholder organization for potato industry. It organizes and coordinates the activities of the subsector to transform it into a robust, competitive and self-regulating industry. One way the NPCK is achieving this is through gathering, processing and sharing relevant information with stakeholders. Improving seed production and distribution is viewed as key in the revitalization of the industry, and enhancing the use of high quality potato seeds is expected to play a significant role in boosting productivity. We are optimistic that the catalogue will be able to reach and benefit many farmers and other key players in the industry.

SYNGENTA FOUNDATION FOR SUSTAINABLE AGRICULTURE

Syngenta Foundation for Sustainable Agriculture (SFSA) is a non-profit organization established by Syngenta under Swiss law. The Foundation's aim is to help smallholder farmers become more professional growers. SFSA does this by extending science-based know-how, facilitating access to quality inputs, and linking smallholders to markets in profitable ways. This adds value for rural communities, and sustainably improves food security.

FOREWORD

The potato (Irish potato) is an important staple and cash crop in Kenya. Ware potatoes are grown for consumption as opposed to seed potatoes. Potatoes can be boiled, fried, mashed or processed to crisps or chips (French fries). They can also be eaten in stews or in mixed foods such as maize and beans.

The importance of potato continues to rise due to increased urbanization and uptake of processed potato products such as crisps and chips. The per capita consumption in Kenya is around 25 kg annually. Potato occupies a prime position in terms of the contributions to food security, poverty eradication and economic development in the region. Consequently, there is growing attraction to the production of potato. The area under which it is grown increases steadily over the years, principally in smallholder production systems. Despite the importance of potato and developments of many innovations including pro-poor varieties and seed production technologies, on-farm yields are on average less than 10 tonnes/ha. This compares poorly with yields of between 40-60 tonnes/ha achievable under optimal farming conditions. Farmers are faced with several challenges that are related to lack or shortage of good quality potato seed of consumer-preferred, high yielding varieties. Many farmers plant own-saved tubers from previous harvests or seed sourced from markets or neighbours. Such tubers are often of poor health status owing to latent infections by *Ralstonia solanacearum* (the bacterial wilt causal agent), viruses and other tuber-borne pathogens. Certified and disease free seed tubers account for less than 5% of the whole potato seed market in Kenya. Inadequate seed regulations and policy on new seed and innovations have also been identified as major bottlenecks in increasing the productivity of potatoes. This Potato Seed Catalogue is therefore a very timely and significant initiative with significant potential to impact the livelihoods. This comes against a background of weak linkages between the seed growers and ware potato producers.

Addressing the general challenge of enhancing productivity, this catalogue is mainly focussed on facilitating access to certified seed by ware potato growers. It provides a description of certified seed growers, potato varieties commonly grown in Kenya, including their agricultural and morphological characteristics. More particularly, specific information on each certified grower e.g. location, contact, variety grown and quantities available will prove useful to users of the catalogue.

This catalogue has been developed through a joint effort of National Potato Council of Kenya (NPCK), Kenya Agricultural Research Institute (KARI-Tigoni), Ministry of Agriculture (MoA), International Potato Center (CIP), Kenya plant Health Inspectorate Institute (KEPHIS), Agricultural Development Corporation (ADC), Kenya National Potato Farmers' Association (KENAPOFA), Kenya National Federation of Agricultural Producers (KENFAP), Midlands Limited, Kisima Farm, and Lead Farmers (Ann Mbugua -Molo and David Maingi - Meru).

It is hoped that the catalogue will contribute to having more farmers gaining direct access to disease free and quality seed thus enhancing the competitiveness of the potato sub-sector, in line with the food security aspirations of Millennium Development Goals (MDGs), Vision 2030 and Agricultural Sector Development Strategy.

Wachira Kaguongo
Chief Executive Officer, National
Potato Council of Kenya



HOW TO USE THIS CATALOGUE

This catalogue describes 13 varieties, registered by KEPHIS and commonly grown in Kenya. It specifies agricultural characteristics and plant characteristics of each variety, accompanied by an illustration of the plant and the tuber. The catalogue ends with the addresses of the representatives, relevant organisations and advice from the sector.

How to find the variety you want

Go to the variety description and read through the characteristics to determine what seed is best for your region. The contact details of the seed merchants and seed outgrowers that offer the variety of your choice can be found in tables 2 and table 3, respectively. The names of the varieties that have been officially released are shown in Table 1.

Agricultural characteristics

The following agricultural characteristics are specified for each variety:

- Tuber features (shape, size, colour of the skin and flesh, depth of the eyes),
- Maturity i.e. how long it takes to mature,
- Yield (of a mature crop),
- Resistance to pests and diseases e.g. leaf roll virus and late blight,
- Tuber dormancy
- Use (e.g. chipping, crisping, boiling, mashing quality)
- Areas to be grown

The provided agricultural information is based on the research by KARI-Tigoni and/or was supplied by KEPHIS, merchants and outgrowers. The figures given for characteristics apply to Kenyan climate conditions. Varieties may show different behaviour under different climate conditions.

Plant characteristics

The following plant characteristics are given in the catalogue:

- Plant characteristics such as size of the leaves
- Sprout characteristics such as shape and colour

Table 1 : List of seed potato varieties as released by KARI

<i>Number</i>	<i>Official Name</i>	<i>Name as used in document</i>
1	Tigoni	Tigoni
2	Asante	Asante
3	Dutch Robjin	Dutch. R
4	Kenya Mavuno	K.Mavuno
5	Kenya Karibu	K.Karibu
6	Kenya Sherekea	K. Sherekea
7	Purple Gold	P. Gold
8	Kenya Sifa	K.Sifa
9	Kenya Mpya	K. Mpya
10	Kenya Pink	K. Pink
11	Desiree	Desiree
12	Kenya Baraka	K. Baraka
13	Annet	Annet

CERTIFIED SEED PRODUCTION IN KENYA

Certified seed potatoes are grown by different merchants and outgrowers located in different parts of the country. Currently, certification procedures are solely done by KEPHIS. The seeds produced may be available at varying quantities depending on the number of growers meeting the conditions at any particular season. Table 2 shows description of the growers together with the quantities available in two periods described as Nov 2012-May 2013 and June 2013 – Oct 2013). It should be noted that the quantities in season 1 are declining over time due to continuous sales during this planting season whereas in period 2, they remain the potential quantities.

Table 2: Description of seed merchants and varieties grown

Name	County	Sub-County	Mobile	Email	Varieties	Period 1 Qty (Tons)	Period 2 Qty (Tons)
ADC	Nakuru	Molo	0721 202565	adcmolo@gmail.com	Tigoni	350	575
					Asante	50	300
					K. Sifa	25	113
					K.Karibu	150	506
					K.Mavuno	125	294
Africala Lily			0721 556879		Dutch. R	82	230
Gordon Milwar	Nakuru	Molo	0722 205992	gm@livewire.co.ke	Tigoni	Nil	90
KARI-Tigoni	Kiambu	Limuru	0733 834675	karitigoni@yahoo.com	Asante	Nil	30
					Dutch	15	23
					Tigoni	23	23
					K.Mpya	23	23
Kisima Farm	Meru	Buuri	0724 643999	shaun@kisima.co.ke kibet@kisima.co.ke	Tigoni	15	91
					Asante	256	190
					K.Shereke a	85	260
Midland Ltd	Nyandarua	Njambini	0721 556879	midlands@abadarefresh.co.ke	K. Mpya	17	88
Suera Farm	Nyandarua	Nyahururu	0706186579	Suera.flowers@gmail.com	-	-	-
GTIL **	Nairobi	Nairobi Loresho	0722 662037	kae@africaonline.co.ke	Asante Tigoni K. Mpya Sherekea	-	50,000 100,000 150,000 100,000

Key: *Period 1 Qty: This represents quantity available during the first period running from Nov 2012 to May 2013*
Period 2 Qty: This represents quantities available during the period running from June 2013 to November 2013.
**** Producing and selling mini-tubers only**

The merchants described in Table 2 produce the seeds in large quantities. However, there are also small scale certified seed growers located in different parts of the country as described in Table 3. Whereas the list of merchant remains fairly constant, the list of out growers is dynamic with new entrants and exits per season. This could majorly be explained by lack of adequate land to practice required pattern of rotation.

Table 3: Description of seed outgrowers and varieties grown

Name	County	District	Mobile	Email	Varieties	Period 1 Qty (Tons)	Period2 Qty (Tons)
David Maingi	Meru	Buuri	0722816281	dkmaingi@yahoo.com	Asante	25	40
Ann Mbugua	Nakuru	Molo	0712512725		K.Karibu K.Mpya Asante	20 10 -	19 12 20
Baraka Outgrowers	Uasingishu	Koitoror	0722943195	moseskeita ny@yahoo.com	Tigoni, K.Sifa	8 -	10 25
Kipgaa Women	E. Marakwet	Cheruor	0711707214		Tigoni Asante	8 5	20 20
Oljorook ATC	Nyandarua	Mawingu	0717653578	atcoljorook@yahoo.com	Tigoni Asante K.Mpya	24 12 3	40 40 40

NOTE: *The list of certified seed producers may not be exhaustive and thus we advise that if you are currently a certified seed producer and your name is missing, kindly contact National Potato Council of Kenya. Call office line: 0725 673 745 or +254202338231 or login to NPCK ICT Platform: www.npck.org.*

Description of NPCK ICT Platform

This provides an interactive linkage between seed producers and ware producers. Seed producers can register and upload production and sales. Ware producing farmers can query availability of certified seeds by sending an SMS starting with NPCK followed by either the name of seed producer or variety desired to 31155 in Safaricom network. For example to know how to get Tigoni variety you should send the message "npck Tigoni" to 31155 and will get a response with details of available quantities of certified seed of Tigoni variety, prices and location of producers.

TIGONI



Plant description: The variety grows tall in height, has an upright stem and light green leaves. The stems are usually thick in structure and produce white flowers.

Tubers: Long-oval. White smooth skin, Pale yellow flesh, Shallow eyes, Poor tuber storage and Turns colour with exposure to light.

Sprouts: Medium size, conical shape, usually light green to brown in colour.

Maturity: Matures in a period between 3-4 months.

Yield: 35-45 tons/ha under good agronomic practices.

Disease resistance: Tolerant to late blight.

Tuber dormancy: Short

Use: Fried chips, boiled, baked, roasted

Areas to be grown: Adaptable high altitude (>2300m.a.s.l) areas



Agricultural Development Corporation

Our Vision

To be the leader of agricultural development in Easter Africa and beyond.

Our Mission

To promote agricultural development in Kenya by expanding agriculture undertakings through production and supply of quality seed, livestock, technology transfers and training in a sustainable and affordable manner.



Aeroponics Technology at ADC



Green-house at ADC



A Potato field at ADC Molo

Head Office Development House 10th Floor, Moi Avenue
P.O. Box 47101 - 00100 Nairobi, Kenya
Tel: 020-2250695 / 185; Fax: 020-2243571,
Cell: 0724 930920, 0735 930920, Email: info@adc.co.ke
www.adc.co.ke

ADC Nakuru Region
P.O. Box 366, Molo
Tel: 0721 202565

ADC Kitale Region
P.O. Box 917, Kitale
Tel: 054 30760
Email: kitl@adc.co.ke

ADC Coast Region
P.O. Box 285, Malindi
Tel: 020 2041645
Email: kiswani@adc.co.ke

ADC is ISO 9001:2008 Certified

Excellence in Agriculture

ASANTE



Plant description: The variety exhibits a medium plant height, with an intermediate type foliage structure; stems upright to semi-upright with light green leaves.

Tuber: Round with pink smooth skin, Pale yellow flesh and shallow eyes.

Sprouts: Medium to large with a strong terminal bud and usually pink in colour.

Maturity: Matures in a period between 3-4 months.

Yield: 35-45 tons/ha under good agronomic practices.

Disease resistance: Fairly tolerant to late blight.

Tuber dormancy: Short

Use: Boiled, baked, mashed, roasted

Areas to be grown- High altitude (>2300m.a.s.l) areas

DUTCH ROBJIN



Plant Description: This variety grows as a medium plant with a stem that is upright with minimal foliage. The leaves are dark green and in most cases no flowering occurs. It has thin stems, green buds. If flowering occurs, flowers are pink with white tips.

Tubers: Round in shape with a slightly rough skin, Medium eyes and Tubers have a very good storage capacity.

Sprouts: Medium sized Red colour and conical shape.

Maturity: **Matures** late 4 to 4 ½ months.

Yield: 35-40 tons/Ha under good agronomic management

Disease resistance: Relatively resistant to late blight.

Tuber dormancy: Long

Use: Crisp quality is good

Areas to be grown- Medium altitude (1500 – 2300m.a.s.l)

KENYA MAVUNO



Plant description: Kenya Mavuno is a tall potato plant attaining a plant height of about 1 meter with strong semi erect stems, green medium sized leaves, abundant white flowers and regular flowering habit. The variety produces a vigorous crop with good ground cover.

Tubers: Oval in shape with shallow eyes and creamy colour.

Sprouts: Light green under diffuse light store.

Maturity: Medium late (>120 days).

Yield: Ranges from 20-30 t/ha (72-110 bags if packed in 110 kg bags per acre) under sufficient rainfall and recommended crop production practices.

Disease resistance: Tolerant to late blight and also tolerant to most of the potato viruses.

Tuber dormancy: Medium, 80-100 days under diffuse light store.

Use: Chipping and crisping quality good, Boiling and mashing quality is also good.

Areas to be grown: Kenya Mavuno is well adapted to a wide range of environments but for optimum productivity, an altitude of 1800-2800m.a.s.l is most suitable.

Genetics Technologies International Ltd



SERVICING AGRICULTURE THROUGH MICROPROPAGATION AND OTHER TECHNOLOGIES

We produce through Tissue Culture and Aeroponics Technology the following superior healthy planting materials



Bananas, Potatoes, Cassava, Pipeapples, Mangoes, Avocado, Passion, Pawpaw, Pyrethrum, Sugarcane, Coffee, Macadamia, Flowers, Trees e.t.c.

Bio fertilizers/PGPR's



Innovative Products for Crop Nutrition

Multi-stage ferments



Metallo Proteins



Bio Gluconates



Innovative Products for Crop Protection

Bio Insecticides



Bio Fungicides



HERB'S



BOTANICALS

BIORATIONALS



P.O Box 47430, 00100 Nairobi, Kenya, Tel: 4183279/ 4180607, 0722 662037 . Fax 3748969,
E-mail: kae@africaonline.co.ke / gtll@wananchi.com

KENYA KARIBU



Plant description: Kenya Karibu is a very tall potato variety (slightly above 1 meter in height) with strong erect stems, slightly dark green, narrow, sharp pointed leaves and very abundant light purple flowers and regular flowering habit. The variety produces a vigorous crop with good ground cover.

Tubers: Round in shape with medium eyes, deep red skin and yellow flesh.

Sprouts: Dark red.

Maturity: Medium late (>110 days).

Yield: Ranges between 35-40 t/ha (90-130 bags if packed in 110 kg bags per acre) under sufficient rainfall and recommended crop production practices.

Disease resistance: Tolerant to late blight and also tolerant to most potato viruses.

Tuber dormancy: Medium 80-100 days under diffuse light store.

Use: Chipping and crisping quality good, Boiling and mashing quality is also good.

Areas to be grown: Kenya Karibu is well adapted to a wide range of environments. An altitude of (1800-2800m.a.s.l) is most suitable.



Better yield and quality with Grimme potato equipment



Grimme cultivator for good soil preparation

- Perfect seed bed
- Less clods



Grimme potato planter for precision planting

- Accurate planting
- Increasing yields
- Less use of seeds



Grimme potato Digger for gentle harvesting

- Proven technology
- Less bruising and damage to crops

Grimme Landmaschinenfabrik GmbH & Co. KG
Hunteburger Str. 32 49401 Damme Germany
Phone +49 5491 666-0 Fax +49 5491 666-2297
grimme@grimme.de www.grimme.com

GRIMME
HARVESTING SUCCESS !

KENYA SHEREKEA



Plant description: Sherekea is a medium sized potato plant (slightly below 1 meter in height) with strong semi erect-stems, dark green, small to medium sized leaves, very abundant light purple flowers and regular flowering habit.

Tubers: Round in shape with medium to deep eyes, Red skin and cream-coloured flesh.

Sprouts: Red-violet under diffuse light store.

Maturity: Medium late (105-120 days).

Yield: Ranges from 40-50 t/ha (145-200 bags if packed in 110 kg bags per acre) under sufficient rainfall and recommended crop production practices

Disease resistance: Multiple resistances to many of the major diseases in potato growing areas in Kenya which includes very strong horizontal resistance to late blight, resistance to PVY and PLRV and moderately susceptible to leaf miner.

Tuber dormancy: Medium 80-100 days under diffuse light store.

Use: Chipping and crisping quality: good. Boiling and mashing quality: good.

Areas to be grown: Sherekea is well adapted to wide a range of environments but for optimum productivity, an altitude of 1800-3000m.a.s.l is most suitable.



Plant this season with Kisima Farm's certified seed potato and expect your yields to triple. We offer "Best of the Best" seed potatoes at competitive prices. M Pesa and Courier options available. Please contact John Kibet on 0721325269 for more information.



When quality matters; use Kisima Farm seed Potato.

PURPLE GOLD



Plant description: Purple Gold is a potato variety (medium size plant slightly below 1 meter height) with semi-erect strong stems, small to medium sized leaves, purple flower and regular flowering habit.

Tubers: Oval in shape with shallow eyes, Dark purple skin, creamy-white flesh.

Sprouts: Purple under diffuse light store.

Maturity: Medium late (105-120 days).

Yield: Ranges between 25-35 t/ha (90-130 bags if packed in 110 kg bags per acre) under sufficient rainfall and recommended crop production practices.

Disease resistance: Moderately resistant to late blight, resistant to PVX, susceptible to PVY, moderately resistant to PLRV, tolerant to most soil borne diseases and moderately susceptible to leaf miner.

Tuber dormancy: Long, 120-135 days under diffuse light store.

Use: Chipping quality: very good. Crisping quality: very good. Boiling and mashing quality: very good.

Areas to be grown: The optimal production altitude for Purple Gold is wide (1800-3000m.a.s.l). It does best in the cool highlands of above 2500m.a.s.l.

KENYA SIFA



Plant description: This is a very tall potato variety (slightly above 1 meter in height) with strong erect stems, dark green broad leaves and abundant light purple flowers with regular flowering habit. The variety produces a vigorous crop with good ground cover.

Tubers: Flat/round in shape with medium eye depth. Pink skin, cream-coloured flesh.

Sprouts: Dark red under diffused light store.

Maturity: Medium (90-110 days).

Yield: Ranges between 20-30 t/ha (72-110 bags if packed in 110 kg bags per acre) under sufficient rainfall and recommended crop production practices.

Disease resistance: Highly tolerant to late blight and also tolerant to most of the potato viruses.

Tuber dormancy: Long (120-135 days) under diffused light store.

Use: Good chipping andboiling quality.

Areas to be grown: Kenya Sifa is well adapted to wide range of environments but for optimum productivity, an altitude of 1800-2800m.a.s.l is most suitable.

KENYA MPYA



Plant Description: Kenya Mpya is a tall potato plant with a height of about 1 meter with strong semi erect stems, light green, medium sized leaves, white flowers with a regular flowering habit. It's a vigorous crop with good ground cover.

Tubers: Oval shape with shallow eyes, Cream-coloured skin with pink eyes and cream-coloured flesh.

Sprouts: Reddish green.

Maturity: Early (90-105 days). This variety bulks ware sized tubers as early as 90 days even when the foliage is still green thus making it suitable in case of low rainfall.

Yield: Ranges between 35-45 t/ha (130-165 bags) under sufficient rainfall and recommended crop production practices.

Disease resistance: Strong horizontal resistance to late blight, extreme resistance to PVX and moderately susceptible to leaf miner.

Tuber dormancy: Short (75 to 90 days).

Use: Goodchippingand crisping quality and also good boiling and mashing quality.

Areas to be grown: For optimum yield, the variety performs best in cool, moist, mid-highlands in altitudes ranging from 1400 to 3000 m.a.s.l.

KERR'S PINK



Plant Description: Kenya Pink is a tall potato plant with white flowers. The tuber has a smooth skin and a cream flesh.

Tubers: Short oval shape with medium eyes, red skin, cream-coloured flesh.

Sprouts: Pink.

Maturity: It takes relatively a medium period to mature (3-3.5 months)

Yield: It is high under good agronomic practices (30-45 tons per Ha)

Disease resistance: Medium resistance to late blight.

Tuber dormancy: Medium (80 to 110 days)

Use: Chipping and crisping quality: good. Boiling and mashing quality: good.

Areas to be grown: Adaptable to low altitude areas (<1500m a.s.l)

DESIREE



Plant Description: Desiree is a medium sized potato plant with strong semi-erect stems and moderate foliage cover.

Tubers: Oval to round with shallow to medium depth of the eyes, red skin, cream-coloured flesh.

Sprouts: Pink.

Maturity: Medium late (105-120 days). 4.5 – 5 months

Yield: Medium (ranges between 30-40 tons per Ha)

Disease resistance: Good especially with resistance to late blight

Tuber dormancy: Medium (80 -90 days)

Use: Chipping quality: moderate. Crisping quality: moderate. Boiling and mashing quality: moderate.

Areas to be grown: Adapted to medium altitude areas

KENYA BARAKA



Plant Description: This is a very tall plant with stem type foliage structure. It has upright stems and no or very weak anthocyanin coloration. It also has high frequency of flowers with medium to strong anthocyanin coloration inside the flower corolla.

Tubers: Oval, very large tubers with rather shallow eyes, yellow skin, pale yellow flesh.

Sprouts: Greenish in colour

Maturity: Late (>120 days). 4 – 4.5 months

Yield: Very High.

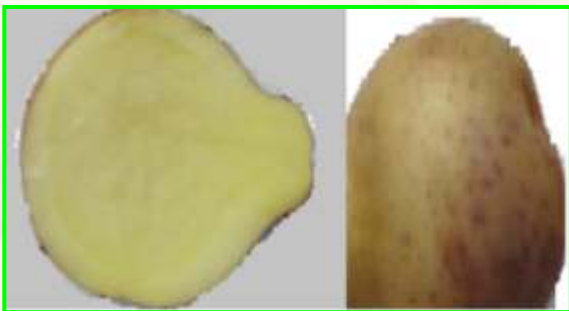
Disease resistance: Good.

Tuber dormancy: Short

Use: Chipping quality: good; crisping quality: good; boiling and mashing quality: moderate.

Areas to be grown: High altitude areas

ANNET



Plant Description: This is a tall potato plant with a height of about 1 meter with strong semi erect stems, light green, medium sized leaves, white flowers with a regular flowering habit.

Tuber: Yellow-red blotched skin and yellow flesh.

Sprouts: Greenish brown

Maturity: 3 – 3.5 months

Yield: High

Disease resistance: Fair resistance to late blight

Tuber dormancy: Medium

Use: Chipping quality: very good; crisping quality: good; Boiling and mashing quality: moderate.

Areas to be grown: Low altitude areas (<2000m.a.s.l)

Good Information / Quotes:

Seed pays it does not cost! You should just buy certified seed!

If you have any questions you can contact:

NPCK: npck@npck.org

Phone: 0725673745/ 20 2338231

SMS Service: 31155

Or

KEPHIS: www.kephis.org

SMS-service: 5354

Phone: 020 3597201/2/3, 0722516221

Or

KARI-Tigoni: kari.tigoni@yahoo.com

Phone: 020 2076915/ 0727031783



Prepared by:

Philemon Chelang'a (NPCK), Juddy Oggema (ADC), Moses Nyongesa (KARI-TIGONI) and Fridah Kathure (NPCK).

Coordinated by:

Wachira Kaguongo (NPCK)

