BATIAN COFFEE

A New Coffee Variety Resistant To Coffee Berry Disease And Coffee Leaf Rust

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Background

✓ Breeding work in coffee started in 1971 after the outbreak of Coffee Berry Disease (*Colletotrichum kahawae)* and Leaf Rust (*Heimelea vastratix*) in the late 1960s

✓ The main breeding goal has been to develop cultivars that combine resistance to diseases with improved yields and quality.

✓ In 1985, the first disease resistant hybrid cultivar, Ruiru 11, was released.

✓ Further research and development has culminated to the release of another disease resistant variety namely Batian.

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IMPORTANCE OF CBD & LEAF RUST

CLR

CBD

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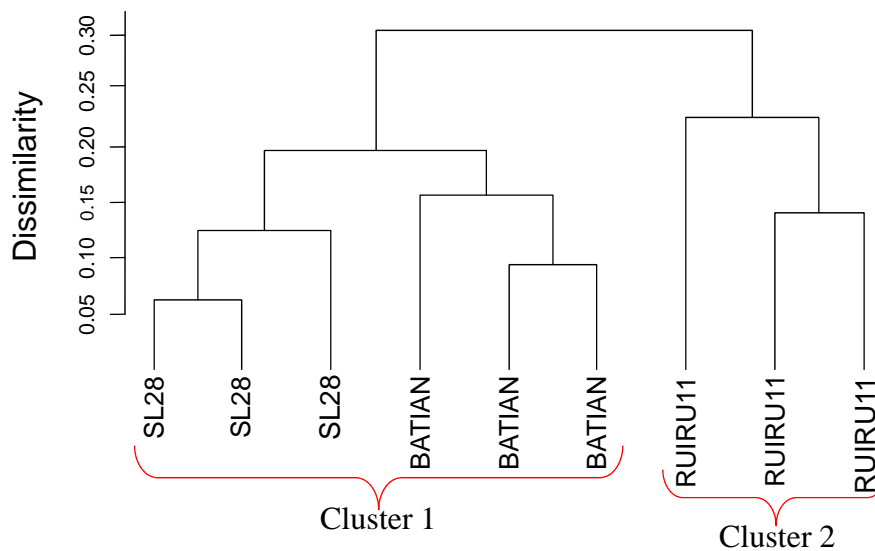

NON INFECTED

LEAF RUST INFECTED

TOWARDS THE NEW VARIETY

- ✓ After the release of Ruiru 11 in 1985, the breeding programme was advanced to address emerging issues
- ✓ Farmers also wanted a variety with features similar to SL28 but resistant to CBD and Leaf Rust.
- ✓ The variety was selected from SL28- and SL34- backcrosses.
- ✓ Donor parents for resistance to diseases are of Arabica type
- ✓ The breeder's data for over ten years confirmed that the material qualified for release to farmers.
- ✓ The variety was recommended for full release in May 2010 and officially launched on 8 September 2010
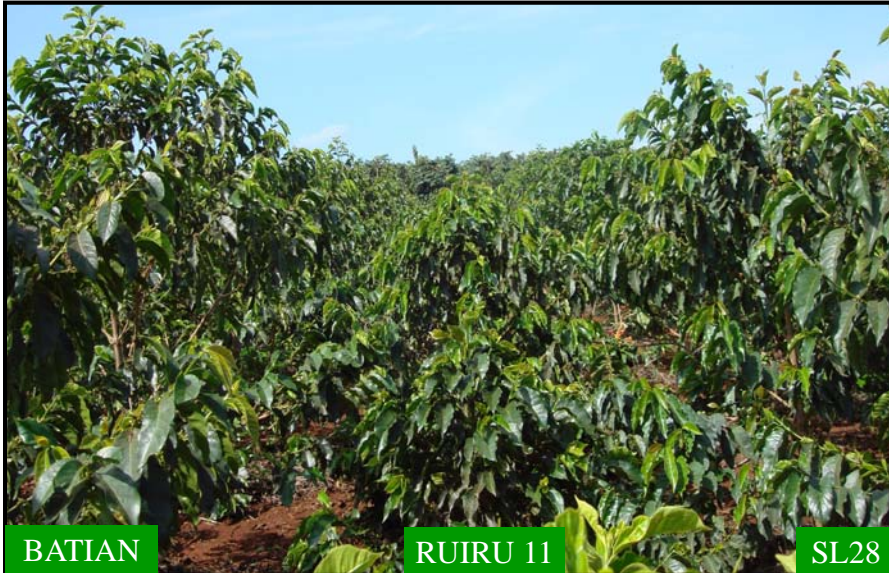
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GENETIC RELATIONSHIP

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MORPHOLOGICAL ✿ DISSIMILARITY

BATIAN   RUIRU 11   SL28

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AGRONOMIC PRACTICES

➢ Recommended Spacing: 2m x 2m giving a plant population of 2500 trees per ha.

➢ The new varieties are resistant to CBD and Leaf Rust. Other diseases should be controlled as recommended for other varieties.

➢ Other management practices are similar to those of traditional coffee varieties.

➢ Can produce up to 5 tons of clean coffee per ha under good management

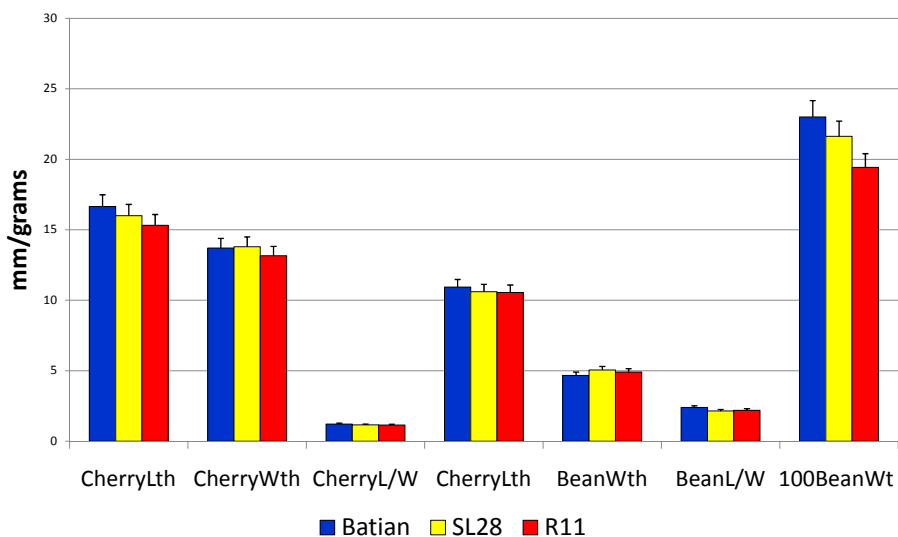*"The Centre of Excellence in Coffee Research"*

AGRONOMIC 🐝 PERFORMANCE

	TEST STATUS	CLEAN COFFEE (t/ha)	CLEAN COFFEE (t/ha) ABOVE BEST CHECK	CLEAN COFFEE (t/ha) ABOVE MEAN OF CHECKS	CBD Score	CLR Score
BATIAN	CANDIDATE	3.56	15.17%	16.57%	3.08	3.33
RUIRU 11	CHECK	3.02			4.15	0.33
SL28	CHECK	2.92			10.36	92.33
MEAN OF CHECKS		2.97				

- ✓ Column 3 Represents Third Year Yield Data
- ✓ CLR Scale: <20 = Highly Resistant; 21-40 = Resistant; 41-60 = Moderate Susceptible; 61-80 = Susceptible; >80 = Highly Susceptible
- ✓ CBD Scale: 0-3 = Highly Resistant; 4-6 = Resistant; 7-9 = Susceptible; 10-12 = Highly Susceptible

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CHERRY AND 🐝 BEAN SIZE

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BATIAN TRIAL PLANTED IN DEC 2007

April 2010

BATIAN WITH 🌿 RIPE CHERRY

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Specialty Coffee of America Cupping Form

Specialty Coffee Association of America Coffee Cupping Form

Name: _____

Date: _____

Quality scale:
6.00 - Good	7.00 - Very Good	8.00 - Excellent	9.00 - Outstanding
6.25	7.25	8.25	9.25
6.50	7.50	8.50	9.50
6.75	7.75	8.75	9.75

FRAGRANCE   FLAVOUR ACIDITY   BODY   UNIFORMITY   OVERALL

AFTERTASTE   BALANCE   SWEETNESS

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Comparative sensory evaluation of commercial coffee varieties and Batian by CQI and Kenyan cuppers

Sensory variables	Panel	Varieties		
		Batian	R11	SL28
Fragrance/Aroma	KEN	7.86	7.29	7.43
	CQI	7.67	7.67	7.58
Flavour	KEN	7.71	7.64	7.50
	CQI	8.00	7.42	7.50
Aftertaste	KEN	7.64	7.43	7.43
	CQI	8.08	7.50	7.58
Acidity	KEN	7.93	7.50	7.64
	CQI	7.92	7.50	7.67
Body	KEN	7.79	7.57	7.50
	CQI	7.83	7.75	7.50
Balance	KEN	7.93	7.57	7.79
	CQI	7.83	7.58	7.83
overall	KEN	7.86	7.57	7.71
	CQI	8.17	7.42	7.58

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Comments By Trade

- *Good acidity*
- *Complex flavour*
- *Sweet*
- *Complex body*
- *Useful body*

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