

Trial Objectives

A. Screen all 10 pairings of the five available KR clones (KR1, KR3, KR4, KR5, KR6) for cross-pollination potential under farm conditions.

Plantation Details

Location	Blocks B & C
Altitude	1,450 m asl
Clones	5 KR clones (KR2 n/a)
Planting date	September 2026
Spacing	3 × 3 m
Planting hole	2 × 2 ft
Basal manure	2 spades compost + 1 spade topsoil
Intercrop	Matoke 6 × 6 m
Shade trees	12 × 12 m



KR1 column — blue stake

Trial Design

66 columns

2 blocks × 33 · bands of 3 columns

5 clones

KR1 · KR3 · KR4 · KR5 · KR6

20 interfaces

Each of 10 clone pairs occurs twice

≥53 trees

Per column · ≥3,498 trees in total

Clones & Column Allocation

Clone	Stake colour	Bands	Columns (3 per band)	Trees (min.)	Role / notes
KR1	Blue	4	4–6 · 19–21 · 46–48 · 55–57	≥636	Reps 1–4
KR3	Orange	4	7–9 · 25–27 · 34–36 · 58–60	≥636	Reps 1–4
KR4	Red	4	10–12 · 31–33 · 43–45 · 52–54	≥636	Reps 1–4
KR5	Green	6	1–3 · 13–15 · 22–24 · 40–42 · 61–63 · 64–66	≥954	Reps 1–4 + guard bands at both ends (cols 1–3, 64–66)
KR6	White	4	16–18 · 28–30 · 37–39 · 49–51	≥636	Reps 1–4
Total		22	66 columns	≥3,498	Each column holds at least 53 seedlings

What We Measure — 10–15 tagged trees on each side of every interface

Flowering date

Each major flowering event

Intensity

Flowering intensity per tagged tree

Synchrony

Did both neighbours flower together?

Fruit set

4–6 weeks after flowering — primary comparison

Retention

Fruit kept later; abnormal flower/fruit drop

Cherry load

Final load per tagged tree, if practical

Column Layout Map (bands of 3 columns)

Columns	Block	Clone	Role	Stake colour	Observe at next boundary
1–3	B	KR5	<i>Guard band</i>	Green	3 4 KR5 × KR1
4–6	B	KR1	<i>Rep 1</i>	Blue	6 7 KR1 × KR3
7–9	B	KR3	<i>Rep 1</i>	Orange	9 10 KR3 × KR4
10–12	B	KR4	<i>Rep 1</i>	Red	12 13 KR4 × KR5
13–15	B	KR5	<i>Rep 1</i>	Green	15 16 KR5 × KR6
16–18	B	KR6	<i>Rep 1</i>	White	18 19 KR6 × KR1
19–21	B	KR1	<i>Rep 2</i>	Blue	21 22 KR1 × KR5
22–24	B	KR5	<i>Rep 2</i>	Green	24 25 KR5 × KR3
25–27	B	KR3	<i>Rep 2</i>	Orange	27 28 KR3 × KR6
28–30	B	KR6	<i>Rep 2</i>	White	30 31 KR6 × KR4
31–33	B	KR4	<i>Rep 2</i>	Red	33 34 KR4 × KR3
34–36	C	KR3	<i>Rep 3</i>	Orange	36 37 KR3 × KR6
37–39	C	KR6	<i>Rep 3</i>	White	39 40 KR6 × KR5
40–42	C	KR5	<i>Rep 3</i>	Green	42 43 KR5 × KR4
43–45	C	KR4	<i>Rep 3</i>	Red	45 46 KR4 × KR1
46–48	C	KR1	<i>Rep 3</i>	Blue	48 49 KR1 × KR6
49–51	C	KR6	<i>Rep 4</i>	White	51 52 KR6 × KR4
52–54	C	KR4	<i>Rep 4</i>	Red	54 55 KR4 × KR1
55–57	C	KR1	<i>Rep 4</i>	Blue	57 58 KR1 × KR3
58–60	C	KR3	<i>Rep 4</i>	Orange	60 61 KR3 × KR5
61–63	C	KR5	<i>Rep 4</i>	Green	63 64 KR5 × KR5 (same-clone reference)
64–66	C	KR5	<i>Guard band</i>	Green	—

Farm Worker Instructions — Step by Step

1

Set out the columns

3 × 3 m in straight lines; stay 1.5 m away from the matoke. Uproot eucalyptus well ahead of pitting.

2

Dig the pits

2 × 2 ft per planting position.

3

Fill the pit

2 spades of manure / compost, 1 spade of black topsoil (free of weed seed), and 25 g TSP (blue ribbon).

4

Close the holes

Wait for the first rains and allow the soil to settle before planting.

5

Plant the right clone in the right column

Water before planting. Check the KR line and match the colour ribbon on the seedling to the column stake (Blue KR1 · Orange KR3 · Red KR4 · Green KR5 · White KR6). Never mix clones in a column.

6

Mulch and protect

Mulch in a 1-foot ring, kept clear of the stem to avoid collar rot. Place 2 palm leaves East–West for shade.

7

Report problems immediately

Dead seedlings, a wrong clone in a column, or lost ribbons — tell the supervisor at once.