# Reducing Postharvest Losses in Rwanda Project

Reducing Postharvest Losses in Rwanda project is a three-year project (2016 – 2019), which is facilitating systemic changes in the horticultural sector with a focus on postharvest practices. Postharvest management is a systems-based challenge and requires an integrated innovation strategy that incorporates technological and financial innovations, capacity building, enhanced market access and other elements to achieve impact at scale.

Funded by Feed the Future Horticultural Innovation Lab, the Reducing Postharvest Losses in Rwanda project is working under the guidance of the Ministry of Agriculture and Animal Resources in Rwanda with implementing partners, Agribusiness Associates, Rwanda Agricultural Board, National Agriculture Export Development Board and University of Rwanda – College of Agriculture and Veterinary Medicine. The project's postharvest technical assistance partner is Postharvest Education Foundation

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# Maturity Indices and Quality: Orange Chili





















# **Maturity Indices - Color Rating**

	Maturity Stage	Class	Description	Photo
	1	Green	The chili is completely green	
	2	Breaker	Break of color from green to tannish-yellow of less than 10% of the chili surface	
	3 Start Har	Turning vest	Tannish-yellow, pink or red color shows on over 10% but not more than 30% of the chili surface	
	4	Yellowish- green	Yellow color shows on over 30% of the green chili	
	5	Green- orange	More than 20% of orange chili surface is covered by green	
	6	Orange- yellow	More than 90% of the chili surface is orangy yellow	
	7	Light orange	Less than 90% of chili surface is covered by light-orange	
Chil	ies for drying sho	1		
	8	Orange	More than 90% of the chili surface is red	

## Weight, Size, Color in Maturity Stage

Maturity Stage	Weight(Average of 20 pcs in g)	Size	Shape	Color
1	79.4	2.9 cm length, 9.8 cm circumference	Shapeless	Green
2	80.1	4.5 cm length, 14.2 cm circumference		Breaker
3	79.6	3.5 cm length, 12.1 cm circumference		Turning
4	79.5	4.2 cm length, 11.9 cm circumference		Yellowish- green
5	79.9	4 cm length, 11.2 cm circumference		Greenish orange
6	80.2	3.1 cm length, 11.5 cm circumference		Orange- yellow
7	80.1	3.6cm length, 11.8 cm circumference		Light- orange
8	80	3.4 cm length, 11.6 cm circumference		Orange

### **Overall Quality**

#### **High Quality**

Orange color is evenly distributed and very minimum defects



#### Rejects

Decay and insect damaged parts may harbor microorganisms





Decay **Quality Defects** 





#### Decay

Microorganisms such as bacteria, yeasts and fungi feed on the fruit and break it down.

# Cracks

It is a disorder resulting in peel thickness and hardness. There is insufficient mineral nutrients in the peel of the fruit.



#### Sunburn

It is a loss of pigmentation resulting in a yellow, bronze, or brown spot on the sun exposed side of the fruit. The sunburnt fruit does not have the capacity to prevent oxidative stress as the pool of soluble antioxidants is reduced.



Insect damage

Damaged parts by insects may harbor microorganisms

## **Chilies Harvesting**

Chillies should be harvested by hand or using scissors. During harvesting keep them in smooth and perforated containers. It is advised to wear gloves during chilies harvesting.





