

Long Peppers Varieties Resistant to Diseases

Strong Against Disease, Hot on the Market.

This group of high-yielding long pepper varieties is developed by the World Vegetable Center. It produces uniform, pungent fruits suitable for fresh and processing markets. Its disease resistance ensures a reliable production under challenging conditions, while its open-pollinated status allows affordable seed multiplication. Ideal for expanding pepper-based agribusiness.



World Vegetable Center
Derek Barchenger

Commodities
Vegetable crop

Sustainable Development Goals

Categories
Production, Improved varieties,
Disease resistance, Yield improvement

Best used with
Zero Energy Cooling Chamber for
Vegetables
See all 1 technologies online

Tested/adopted in

Legend:
■ Tested & adopted
■ Adopted
■ Tested
■ Testing ongoing

Where it can be used

This technology can be used in the colored agro-ecological zones.

Target groups
Breeders, Farmers, Seed companies,
Sellers

This technology is **pre-validated**. 7-8 Scaling readiness: idea maturity: 7/9; level of use: 8/9

Cost: **\$\$\$ 2336 USD** All production cost for 1 hectare
ROI: **\$\$\$ up to 434 %** over 10 harvests

6.8–18.01 t/ha over 10 harvest
70–85 days Days to Maturity after Transplanting
Officially released in Benin in 2025 **IP** Open source / open access

Problem

- Crop losses from disease and heat make seed and fruit supply unreliable.
- Poor fruit quality lowers market value for both fresh and processed products.
- High input costs and pesticide use reduce profit margins across the chain.
- Limited access to improved open-pollinated varieties constrains seed sector growth.

Solution

- **Strong disease resistance** to PVY, CMV, and other major threats.
- **High yields** of 6.8–18.01 t/ha for improved productivity.
- **Long, slender, spicy fruits** ideal for fresh sale and processing.
- **Uniform quality** meets market and export standards.

Key points to design your business plan

For Seed Multipliers
This high-yielding, disease-resistant cayenne-type pepper is ideal for scaling in disease-prone and hot regions. Source clean foundation seed from WorldVeg, ensure strict isolation and sorting to preserve fruit uniformity, and certify seed for formal markets. It offers a strong market entry point for multipliers looking to supply resilient, farmer-preferred varieties.

For Resellers (Agro-dealers, Wholesalers)
Book certified seed early from trusted suppliers. Stock in small packs and promote it as a solution to crop loss in heat and virus-prone areas. Train your team to highlight its consistent yields and market-preferred traits. Perfect for cooperatives and NGO-led resilience programs.

For Users (Commercial Farmers, Aggregators, Processors)
Adopt this variety to reduce disease losses and ensure steady yields under tough conditions. Ideal for outgrower schemes and chili processing, thanks to its uniform, pungent fruits. Order early, plan for post-harvest handling, and secure supply contracts with confidence.

Inclusion assessment **4** Climate impact **7**