2026 ACA Annual Cashew Conference & Expo

ACA
AFRICAN CASHEW ALLIANCE

SUSTAINABLE CASHEW SUPPLY THROUGH POLICY, INVESTMENT AND PARTNERSHIP

Ghana
La Palm Royal Beach Hotel, Accra
15 - 18 September 2026

COCOA RESEARCH INSTITUTE OF NIGERIA
CRIN

Management of Cashew Pests and Diseases: Tolerant & Climate-Smart Varieties

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Breeding and Distribution of Pest- and Disease-tolerant Cashew varieties

- Cashew production is influenced by climate variability, pest pressure and quality of planting material
- Breeding objectives: Pests, Climate, Productivity, Market quality
- Step 1: Identify the parent materials – Select superior parents from Germplasm, farmers-selected superior trees
- Step 2: Characterize the parents – Yield, nut size, flowering, kernel recovery, response to biotic and abiotic stresses
- Step 3: Making controlled crosses – Selection of complementary parents

Breeding and Distribution of Pest- and Disease-tolerant Cashew varieties (2)

- High yield x disease tolerance x drought tolerance
- Good kernel quality x pest tolerance x climate adaptation
- Step 4: Production and screening of progenies
- Step 5: Select superior individuals – Retain individuals with combined tolerance + productivity rather than tolerance alone
- Germplasm collection → Characterization → Pest/disease screening → Climate-stress screening → Multi-location evaluation → Selection → Molecular validation → Variety release → Rapid multiplication → Distribution → Farmer/business adoption → Monitoring

Screening germplasm for tolerance to diseases

- Stage 1: Germplasm characterization – Establish unique identity and records of accessions and genotypes
- Passport data – Origin, morphological descriptors, genetic identity, yield characteristics
- Stage 2: Disease screening – Evaluate genotypes against Anthracnose, Inflorescence/twig/leaf blight, Powdery mildew
- Resistance → Tolerance → Escape → Susceptibility
- Genotype × Environment × Disease × Climate

Promoting climate-smart cashew genotypes that withstand pest and disease pressure

- A climate-smart genotype should ideally possess:
- **Abiotic-stress tolerance:** Drought & heat tolerance, irregular rainfall, water use, recovery after drought, adaptation to soils
- **Biotic-stress tolerance:** Anthracnose, inflorescence blight, PMD, *root disease & insect pest tolerance
- **Production stability:** Stable yield across seasons, early bearing, regular flowering, good fruit set, good nut retention
- **Market traits:** High KOR, large/bold nuts, good kernel quality, good shelling characteristics, acceptable apple quality