**ALA10- Integrating Breeding Management system (BMS) in plant breeding**

**Prerequisites**

eModules 1, 2, 3 and Cowpea module in Plant Breeding Methods and Cultivar Development

MS Excel proficiency

**Purpose**

To make a “germplasm list” of lines involved in the development of cowpea cultivar “California Blackeye 27” (CB27) from existing BMS database.

**Background**

High temperature and long-day conditions suppress flower bud development and reduce pod set of most cowpea genotypes. Therefore breeders are interested to identify cowpea genotypes that overcome this problem, and utilize them as parents to develop high yielding cowpea cultivars that can produce abundant flowers and pods under high temperature and long-day conditions along with disease and pest resistance. Cowpea cultivar, CB27 is an ideal high yielding black eye cowpea cultivar suitable for growing conditions in Central Valley of California due to its tolerance to grow and produce flowers and pods under high temperature as well as broad base resistance to Fusarium wilt and root knot nematodes.

**For this exercise, students need to use BMS platform to search for the following genotypes in the existing Cowpea database (in BMS) involved in the production of cultivar CB27 and make a list and save it for use in future exercises.**

1. Prima
2. TVu4552
3. UCD7977
4. CB5
5. CB3

**Tasks**

1. To get familiarize with BMS platform work flow
2. To understand how to use “Manage Lists” function under “BREEDING ACTIVITIES” tab to search germplasm lines from existing cowpea database in BMS.
3. To save the prepared list for further use in a breeding program.