GROWTH and DEVELOPMENTAL STAGES of COWPEA (Black-eyed Pea)

The following examples illustrate developmental stages of cowpea, southern pea or black-eyed pea (*Vigna unguiculata* subsp. *unguiculata*), and should be applicable to all growing environments and divergent cultivars.

No specific descriptors are currently published to distinguish the different growth stages of cowpea; therefore the following descriptors are proposed by the Legume ipmPIPE (H. F. Schwartz, facilitator) to promote communications between legume specialists, stakeholders and insurance industry representatives. The following descriptors are based upon those used for Common Bean.

Vegetative Growth Stages
Cowpea is a short-day, warm-weather crop. Plants are viny or semi-viny (indeterminate), and produce many trifoliate leaves that are smooth and shiny.

VE – seedling emergence
VC – cotyledons visible at node 1; unifoliate leaves unfolded at the next node
V1 – the first trifoliate leaf has unfolded from the next node
V2 – the second trifoliate leaf has unfolded from the next node
V3 – the third trifoliate leaf has unfolded from the next node
V4 – the fourth trifoliate leaf has unfolded from the next node
Vn – the nth trifoliate leaf has unfolded from the next node

Reproductive Growth Stages
Flowers are borne in pairs on racemes, and cylindrical pods are smooth and up to 12 inches long with numerous small, bean-shaped seeds. The self-pollinated plants turn yellow to tan at maturity or after frost.

R1 – early bloom, one open flower on the plant
R2 – full bloom, 50% to 100% of flowers are open
R3 – first pod has reached maximum length (early pod set)
R4 – 50% of pods have reached maximum length (mid pod set)
R5 – one pod with fully developed seeds (early seed fill)
R6 – 50% of pods with fully developed seeds (mid seed fill)

Physiological Maturity
R7 – one pod has changed from green to mature color (physiological maturity)
R8 – 80% of pods have changed to mature color (harvest maturity)

More information on cowpea and its characteristics are available from resources including: *Principles of Field Crop Production, 3rd Ed.* – J.H. Martin et al. 1976. Macmillan Publ. Co.