GROWTH and DEVELOPMENT STAGES of the CHICKPEA PLANT

The following illustrate developmental stages of chickpea or garbanzo bean (*Cicer arietinum*), and should be applicable to all growing environments and divergent cultivars. Stems are branched, erect or spreading, sometimes shrubby and much branched; stems, foliage and immature pods may be olive, dark green or bluish green in color. No specific descriptors are currently published to distinguish the different growth stages of chickpea; therefore the following descriptors are proposed by the Legume ipmPIPE (H. F. Schwartz, facilitator) to facilitate communications between legume specialists, stakeholders and insurance industry representatives.

**Vegetative Growth Stages**
Count the number of visible nodes on the main stem up to the node that includes the highest fully developed leaf. Leaves have 3 to 8 pairs of small leaflets that are oval in shape.

- VE – seedling emergence
- V1 – the first multifoliate leaf has unfolded from the stem
- V2 – the second multifoliate leaf has unfolded from the stem
- V3 – the third multifoliate leaf has unfolded from the stem
- V4 – the fourth multifoliate leaf has unfolded from the stem
- Vn – the nth multifoliate leaf has unfolded from the stem

**Reproductive Growth Stages**
The self-pollinated plant produces 1 – 2 flowers at the tip of axillary branches. Pods may contain up to 3 seeds, and are oval in shape; and at maturity, the plants and pods turn yellow to tan.

- R1 – early bloom, one open flower on the plant
- R2 – full bloom, most flowers are open
- R3 – early pod visible
- R4 – flat pod, pod has reached its full size and is largely flat.
- R5 – early seed, seed in any single pod fill the pod cavity
- R6 – full seed, all seeds fill the pod cavity which is rounded

**Physiological Maturity**
- R7 – the leaves start yellowing and 50% of the pods have turned yellow
- R8 – 90% of pods on the plant are golden-brown