Seedlings with the following defects are classified as abnormal (for more details, refer to ISTA, 2005a,b or AOSA, 2005):

- **Roots**
  - Primary root stunted, stubby, missing, broken, split from the tip, spindly, trapped in the seed coat, with negative geotropism, glassy, decayed due to primary infection or with less than two secondary roots in monocots

- **Shoot (hypocotyl, epicotyl and mesocotyl)**
  - Short and thick, split right through, missing, constricted, twisted, glassy or decayed due to primary infection

- **Terminal bud/leaves**
  - Deformed, damaged, missing or decayed as a result of primary infection

- **Cotyledons**
  - Swollen, deformed, necrotic, glassy, separated or missing, and decayed due to primary infection

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Extracted from Rao et al. 2006. p65