

#### Abstract:

There exist about 61 species of Actinidia around the world and most are originated from China. Among them, 3 species, *A. deliciosa*, *A. chinensis* and *A. arguta*, are commercially cultivated, although *A. arguta* at a minor extent. Most Actinidia fruits are relatively small but some have very impressive horticultural advantages for commercialization, i.e., vitamin content, excellent flavor, sweetness and other.

Several reports were recently published on CPPU [N-(2-chloro-4-pyridyl)-N'-phenylurea, Fulmet], a diphenylurea-derivative cytokinin-like compound that stimulates fruit development. However, they all focused on *A. deliciosa* cv. 'Hayward'. We investigated several Actinidia species for their CPPU sensitivity. Fruit of *A. macrosperma* were not affected by 16 ppm CPPU and fruit of *A. polygama* and *A. melanandra* showed a little increase only in cross diameter, but not in length. Other species, like *A. chinensis* and *A. deliciosa*, were rather sensitive to CPPU, and differences within species were also recorded. More details are discussed on fruit development, fruit quality and other features in the paper.