Maturity indices for harvesting of curry chilli (*Capsicum annum*) L. hybrid: Hungarian Yellow Wax

W A H Champa*, B M C Balasooriya, M D Fernando and K B Palipane
Institute of Post Harvest Technology, Research and Development Center, Anuradhapura

Post harvest losses of *Capsicum* are much higher due to its soft nature, high rate of respiration, rapid ripening and high water content, causing mechanical damages, shriveling and microbial spoilage during postharvest handling, limiting its marketable life to not more than a week. Therefore, a study was conducted to develop subjective and objective maturity indices to identify the best stage of maturity for harvesting of curry chilli (*Capsicum annum* L.) hybrid: Hungarian Yellow Wax (HYW) and its effect on quantity and quality of the yield and shelf life.

Three different harvesting stages were practiced, namely, 13, 17 and 21 days after fruit set (DAFS). Pod length, diameter, wall thickness, weight, colour, dry matter content, firmness, total soluble solids, fiber content and titratable acidity were measured. A separate set of samples were kept in plastic crates and stored at ambient conditions (30 ± 2 ^{0}C and 75-80 % RH) and they were checked for quality parameters at three day intervals in storage up to a period of 12 days.

The average yield, pod length, diameter, pod wall thickness, weight and dry matter content of *Capsicum* pods, harvested at different maturity stages were significantly different. Higher crude fiber content was observed in pods harvested at 17 and 21 DAFS. No significant difference was observed in titratable acidity and total soluble solids in *Capsicum* with the stage of maturity at harvesting. The rate of weight loss in mature pods was lower than that of immature pods. Reduction of external appearance and rate of colour change were high at late harvesting stages than early harvesting stages. Thus, right phase of maturity has considerable bearing on post harvest life, marketability, optimum yield and external quality of the produce.
The results showed that *Capsicum annum* L. hybrid Hungarian Yellow Wax (HYW) harvested at 17 days after fruit set recorded optimum yield while maintaining the keeping quality at its best with organoleptic properties. At this stage, pods were greenish yellow in color with an average pod weight of 18g.

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