The objective of this study is to determine the effect of maturity indices for harvesting of cabbage (Brassica oleracea L.) Grand KK cross in the off-season at Sa Pa, Lao Cai province on fresh produce quality and transportation capacity for marketing. The changes of physiological as well as physico-chemical parameters and mechanical damages at five different maturity stages namely 70, 75, 80, 85, 90 days after planting were analysed, of which the best maturity stage for harvesting cabbage was at 85-90 days after planting. Cabbage at this maturity stage is physiologically mature, qualitative, and reducing of mechanical damages during produce delivery processes. At this maturity stage, the heads were highly firm, with outer dark green leaves, and had weight of over 1,800 g, height of over 11 cm, as well as diameter of more than 18 cm.

Key words: Maturity indices, head cabbage Grand KK cross off-season, quality, mechanical damages.