

### Abstract:

Changes in some biochemical parameters during cold storage of artichoke heads (cv. Violetto di Provenza) harvested in winter and spring seasons and packaged with two different types of plastic films were investigated. Heads were stored at 1 °C for five weeks. Intermediate permeability film was able to preserve the commercial quality of the product for five and four weeks in winter and spring harvested heads, respectively. At the end of the storage period, heads packed with this film showed good turgidity, absence of off-flavours and browning. Instead the other film induced asphyxia symptoms in heads after the first week in storage. Regarding biochemical parameters, a small increase in chlorogenic and dicaffeoylquinic acids content was observed, more marked in spring harvested heads and controlled by the wrapping film. Fructose and sucrose showed an increasing trend, whereas glucose and inulin tended to decrease during storage. Also in this case the film packing presence contributed to counteract these trends. Finally, enzyme activities were weakly influenced by the wrapping film. During the storage period, POD markedly increased in winter harvested heads, whereas PPO showed a slight decreasing trend in spring trials.