

**Title** Studies on extension of shelf life of grape through Alternative Oxidase inhibitors alone and in combination with Polyamines

**Authors** Y. Narayana Reddy, V. Ramprasad, M.G.D.M. Reddy

**Citation** ISHS Acta Horticulturae 785:435-440. 2008.

**Keywords** *Vitis vinifera*; alternative oxidase inhibitors (AOX inhibitors); polyamines; shelf life; berry shatter; total soluble solids

#### **Abstract**

An experiment was conducted with Thompson Seedless grapes to study the effect of post harvest treatment with AOX inhibitors alone and in combination with polyamines on the shelf life when stored at 4°C. Cumulative physiological loss of weight (CPLW) increased gradually during storage in grapes but the AOX-inhibitors and polyamines effectively reduced the CPLW and berry shatter during storage (Spermine + n-PG) 1.0 mM, (Spermidine + n-PG) 1.0 mM recorded higher TSS. The shelf life was higher (48.6 days) with SHAM 1.0 mM and 47 days with n-PG 1.0 mM and in the combination treatment (spermidine + SHAM) 1.0 mM gave the highest shelf life of 51 days followed by spermine 1.0 mM + SHAM 1.0 mM (45 days) and rest of the treatments were at par with each other.