

#### Abstract:

Experiments were carried out using eight different table grape cultivars. Sensitivity of grapes to SO<sub>2</sub> at room temperature and at low temperature was studied. The results showed that the sequence of sensitivity of table grapes cultivars to SO<sub>2</sub> (highest to lowest) was 'Ribier' > 'Hongbaoshi' > 'Red Globe' > 'Niunai' > 'Kyoho' > 'Muscate Hamburg' > 'Longyan' > 'Black Autumn'. The different eight grape cultivars can be classified into four types: very sensitive ('Ribier', 'Hongbaoshi', and 'Red globe'), moderately sensitive ('Niunai'), moderately tolerant ('Kyoho' and 'Muscate Hamburg') and, very tolerant ('Longyan', and 'Black Autumn'). The relationship between bleaching index, fumigation concentration and exposure time was not linear. However, the bleaching index was strongly correlated with fumigation concentration and exposure time. Furthermore, the effects of fumigation concentration on bleaching were more significant than the effects of exposure time. Bleaching increased with increase in fumigation concentration, exposure time and temperature.