

REGISTRATION OF 2,4-D FOR INCREASING FRUIT SIZE OF MANDARINS AND MANDARIN HYBRIDS IN CALIFORNIA

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ABSTRACT

A 24C registration of 2,4-D (ALCO CitrusFix) for fruit size increase of mandarins and mandarin hybrids was granted by the Department of Pesticide Regulation, California Environment Protection Agency in January 2005. This registration was based on the efficacy data generated from experiments on 'Fina Sodea' Clementine mandarin conducted in 2002 and 2003. 24 ppm of 2,4-D was able to increase the yield and commercially desirable large sized fruit significantly in both "ON" (2002) and "OFF" (2003) years. The average yield per tree was increased from 61.58 kg of control (non-spray) to 77.84 kg (↑ 26%) in 2002 and from 31.81 kg to 45.16 kg (↑ 42%) in 2003. The 24 ppm 2,4-D treatment was able to increase the large-jumbo-mammoth sized fruit from 47.05 kg to 66.30 kg (↑ 41%) in 2002 and from 16.75 kg to 23.66 kg (↑ 41%) in 2003. Additional experiments of 2,4-D with 12, 24, and 48 ppm and more timing on 'Afourer' mandarin and 'Minneola' tangelo in 2003 and 2004 showed that 2,4-D treatments could increase yield and large sized fruit in an "ON" year (2004). This application of 2,4-D should offer growers an additional tool to enhance their return on mandarins and mandarin hybrids.

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