



Journal
J. Biol. Chem.
Environ. Sci., 2017,
Vol. 12(1): 523-544
www.acepsag.org

RESPONSE OF BALADY MANDARIN TREES OF SPRAYING SOME PLANT EXTRACTS

Faissal F. Ahmed* and Randa E.Y. Habasy**

*Hort. Dept. Fac. of Agric. Minia Univ., Egypt

**Citriculture Res. Dept. Hort. Res. Instit. A.R.C. Giza, Egypt

ABSTRACT

During 2015 and 2016 seasons oils of garlic, onion, moringa, olive, black cumin seed and flax seed as well as extract of turmeric each at 5 % were sprayed for elucidating their beneficial effects on vegetative growth characteristics, leaf pigments and nutrients, percentages of initial fruit setting and fruit retention, yield and quality of fruits of Balady mandarin trees grown under Minia region conditions. These plant extracts were sprayed three times at the start of Spring growth cycle, just after fruit setting and two months later.

Treating the trees with these plant extracts thrice had material promotion on all the investigated characteristics comparing with the check treatment. These plant extracts could be arranged with regard to their positive action on fruiting as follows oils of Flax seed, black cumin seed, olive, moringa, onion and garlic as well as turmeric extract, in ascending order.

Carrying out three sprays of turmeric extract at 5% at the start of Spring grown cycle, just after fruit setting and two months later was responsible for improving yield and fruit quality of Balady mandarin trees grown under Minia region conditions.

Key words : Balady mandarins, fruit quality, plant extracts, yield,