

**XXVII International Horticultural Congress
and Exhibition, Page 47-48 (August 2006)**

S02-0-14 (15:30-16:00)

Oiltea *Camellia* – Eastern “Olive” for the World

Donglin Zhang^{1*}, Riqing Zhang¹, Jiangfan Yu¹, Lois B. Stack², Bixia Xie¹, and John M. Ruter³

¹College of Resource and Environment, Central South Forestry University, Changsha, Hunan, 410004, China

²Cooperative Extension, University of Maine, Orono, ME, 04469, USA

³Department of Horticulture, University of Georgia, Tifton, GA, 31793-0748, USA

Oiltea *Camellia* (*Camellia oleifera* Abel) is a promising horticultural crop that cultivated for various purposes in China for more than 1000 years. It is a small tree, which occurs naturally from 18° to 34° North latitude and grows in acidic soils where January mean temperatures do not drop below 2C. As a cooking oil, it compares favorably with olive oil, stores well at room temperature, and has a high smoke temperature. Tea oil is also used in the manufacture of soap, margarine, hair oil, lubricants, paint, rustproof oil and other high-molecular weight compounds. *Camellia oleifera* is used in cosmetology and dermatopharmacy, in such diverse products as day creams, night creams, anti-wrinkle compounds, lipstick, hair creams, make-up, anti-sun preparations, rouge and make-up removers. Extracts from the residues of oiltea processing have been used in livestock feeds, pesticides and fertilizers. Use of tea oil products to control rice blast, sheath and culm blight of rice, wheat rust, rice hopper, cutworms, cotton aphids, scales, longhorned beetles and leeches suggests potential for development of new biological-based pesticides from this plant. Although oiltea is planted about 40,000 km² in China for edible oil production, other countries know little about this species and only planted as ornamental plant. To share this valued crop to the world, selecting promising clones for targeted habitats is the key to success. Cloning propagation using hypocotyle grafting is recommended. Management practices, such as preparing planting sites with organic fertilizer, controlling weed, thinning, pruning, alternating harvest time, improving harvest techniques, and etc., could significantly increase the economic return for *C. oleifera* plantations. Further studies on genetic improvement of oiltea will improve its popularity around the world.

Key words: *Camellia oleifera*, hypocotyle grafting, oil, oiltea, olive

*Corresponding author: donglin@maine.edu