## 油茶

*Camellia oleifera* Abel (1818)

**分布：**中国长江以南和陕西省汉中、安康地区以及越南，海拔100～1300米。可寻地点:湖南省永兴县枣子村。

**概况：**作为一种油料树种，目前中国栽培的油茶面积达300万公顷。虽有长期的栽培，但其确切的原产地尚不清楚。近年来，美国佐治亚大学的John Ruter博士与美国山茶协会合作，在美国东南部将油茶作为油料植物加以开发利用，现进展顺利。

油茶具有的抗寒性，已经得到证实，来自江西省庐山的一些油茶植株抗寒性非常好。这些植物与茶梅（*C. sasanqua*）的杂交种显示出的抗寒性已成为山茶生长区域最寒冷地区的重要园林树种。

油茶适应性强，容易栽培，美中不足的是，油茶的花太小，叶片缺乏亮光，作为观赏植物并没有引起人们的关注。然而，油茶是较抗寒的一种阔叶常绿树，黄褐色的树皮很好看，因此，在园林绿化应用上还是有前景的。油茶通常与茶梅或红山茶（*C. japonica*）杂交。用发展的眼光看，用它与其他的山茶原种进行杂交以产生更抗寒的园艺品种也是有可能的。油茶也能与滇山茶（*C. reticulata*）或者与茶梅和滇山茶之间的杂交种（*C. sasanqua* × *C. reticulata*）进行授粉，以产生比滇山茶类品种更为抗寒的

**Distribution:** South of the Yangtse River and in Hanzhong and Ankang in Shanxi Province, China, as well as in Vietnam; Elevation: 100-1,300 m; Specific locality: Zaozi Village, Yongxing County, Hunan Province, China.

**General Comments:** There are over 3 millions hectares of *Camellia oleifera* cultivated for oil production in China at present, but as a result of long term cultivation, its exact native locality is unknown. In recent years, Dr. John Ruter of the University of Georgia, in association with members of the American Camellia Society, has explored the use of *C. oleifera* as an oil-producing plant in the southeastern United States. Preliminary results from this program are very promising.

*C. oleifera* is best known in the United States for its cold tolerance. Plants obtained from the Lu Shan hills in Jiangxi Province have proven to be very resistant to winter injury. Hybrids of these with cultivars of *C. sasanqua* have shown outstanding hardiness and have become important garden plants in the coldest areas where *camellias* are grown. Dr. Bill Ackerman demonstrated the cold resistance of *C. oleifera* and used it through breeding to develop many excellent cultivars.

The species, *C. oleifera*, is not prized as an ornamental even though it is very adaptable and easily cultivated. Unfortunately, the flowers are very small and the foliage is not glossy. Nevertheless, *Camellia oleifera* has potential for the landscape because it is one of the hardier broad-leafed evergreens, and its cinnamon-colored bark is very attractive. It is usually used as a hybrid with *C. sasanqua or C. japonica*. There is the possibility of hybridizing it with other species to produce additional hardy garden forms. It can be crossed with *C. reticulata* or

野生油茶树 A wild tree of *C. oleifera*

绚丽多彩的园艺杂交种，现这项研究刚刚开始进行。油茶与茶叶树之间的杂交种抗寒性可能较强，但就我们所知，这样的杂交种尚未出现。

**性状：** 花白色，稍微带芳香，直径5.5～7.0厘米，顶生或腋生，密花。鳞片约8枚，随花朵开放而脱落，外面密被柔毛，里面无毛。花瓣7～8枚，长3.2～3.9厘米，宽1.5～2.4厘米，倒卵形至倒心形，先端裂深6毫米，外轮瓣背少量被短柔毛，基部与雄蕊柱连生1～2毫米。雄蕊无毛，长约1.8厘米，基部连生形成8毫米长短管，雄蕊约90枚。雌蕊长1.2～1.6厘米，花柱3～5裂，无毛，有时基部有少量毛，基部连生40%～75%，子房被绒毛，花期秋季。

蒴果球形，长1.8～3.3厘米，直径2.3～3.8厘米或更大，成熟时果皮绿色、黄色甚至红色，被长柔毛，3～5室，果皮厚3～6毫米。种子含油量为39.9%～54.9%。

叶椭圆形至阔椭圆形，先端急尖至短尖，基部楔形至圆形，长4.0～11.7厘米，宽1.4～5.1厘米，边缘具齿，齿距2～4毫米，叶面光滑，中脉中等被微柔毛，叶背有时有少量毛，中脉被稀疏长柔毛或者无毛。叶柄长3～6毫米，上部被长柔毛或微柔毛，下部被长柔毛或无毛。

灌木或小乔木，高可达7米，嫩枝无毛至被长柔毛，而后变无毛，黄褐色或褐色，大枝灰褐色至铁锈色，老枝光滑，通常为黄褐色。

**染色体数：** 2n = 30、60、90（Kondo, 1977）。

*C. sasanqua* X *C. reticulata* hybrids to produce showy garden hybrids that are hardier than the forms of *C. reticulata*, but this approach has only begun.

**Botanical characteristics: Flowers** are white, somewhat fragrant, 5.5- 7.0 cm in diameter, borne at the tips of shoots and additionally in leaf axils; flower set may be abundant. **Perules** approximately 8, deciduous as flower opens, outside heavily pubescent, inside glabrous. **Petals** 7-8, 3.2-3.9 cm long, 1.5-2.4 cm wide, obovate to obcordate, cleft at tip up to 6 mm, some pubescence on exterior of outer petals, inside glabrous, fused with the staminal column 1-2 mm from the base. **Androecium** glabrous, approximately 1.8 cm long, the outermost stamens fused from the base up to about 8 mm forming a cup, approximately 90 stamens. **Gynoecium** 1.2-1.6 cm long, 3-5 styles, glabrous, sometimes with a small amount of hair at the base, 40%-75 % fused from the base, ovary tomentose. **Blooming season:** autumn.

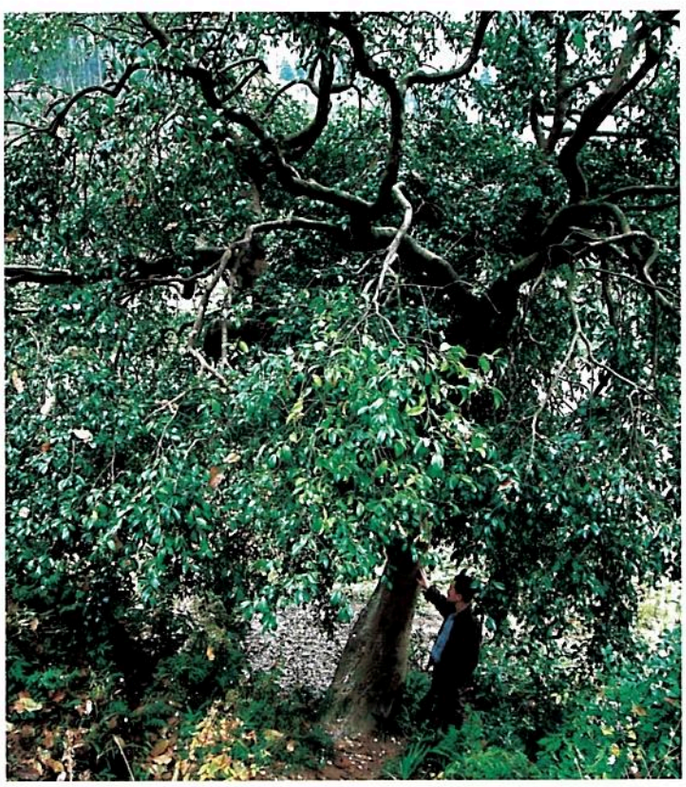
**Capsules** globose, 1.8-3.3 cm long, 2.3-3.8 cm in diameter (often much larger), green, yellowish or even red at maturity, villous, 3-5 locules, pericarp wall 3-6 mm thick. **Seed** oil content ranges from 39.9%-54.9%.

**Leaves** elliptic to broadly elliptic in shape, tip acute to short acuminate, base cuneate to mostly rounded, 4.0-11.7 cm long, 1.4-5.1 cm wide, margin serrulate, teeth spaced 2-4 mm apart, upper surface smooth, midrib moderately puberulent, lower surface rarely with a few hairs, midrib sparsely villous or glabrous. **Petioles** 3-6 mm long, upper side villous to puberulent, lower side villous or glabrous.

**Shrub** or small tree up to 7 m tall, young shoots range from glabrous to heavily villous, shoots become glabrescent with age, young shoots tan or brown in color, older branches becoming smooth, larger branches gray-brown to rust, often cinnamon, in color.

**Chromosome Number:** 2n = 30, 60, 90 (Kondo, 1977).

(Data from Chang, 1981; Parks, unpub.; Sealy, 1958)



A big tree of *C. oleifera* grown naturally in Hanzhong area, Shanxi Province, China
陕西省汉中市一株油茶大树