

# WINGED BURNING BUSH

[*Euonymus alatus* (Thunb.) Sieb.]

## EUAL13



UGA2307066

**Habit:** Shrub typically to 2.5 m (8 ft)<sup>10,20</sup> or possibly 7 m (23 ft) and equal in spread<sup>15,5</sup>; size depends on cultivar of which there are at least 10<sup>5</sup>.

**Reproduction:** By seed<sup>10,20,15</sup> and stem cuttings, success greater with the addition of the plant hormone IBA<sup>3,5,21</sup>; possibly by root suckers<sup>18</sup>, though not confirmed in horticultural literature.

**Leaves:** Opposite, subsessile, elliptic to obovate, to 8 cm (3 7/16 in) long, sharply serrulate; upper surface dark green, turning bright red in autumn; deciduous<sup>10,15,20</sup>; may be downy beneath<sup>15,5</sup>.

**Stems:** Opposite with 2-4 conspicuous corky wings<sup>10,5,20,15</sup> that run the length of the stem<sup>21</sup> and apparently serve no function<sup>2</sup>; corky wings may not be present or as pronounced on the "Compactus" cultivar<sup>4</sup>.

**Flowers:** Small, 6-8 mm (~1/4 in) wide, inconspicuous yellow-green flowers with four petals; April to June<sup>15,5</sup>; stamens are opposite the petals and very short<sup>10</sup>.

**Fruits/Seeds:** Fruit smooth, purplish; 1-4-lobed capsule<sup>10,15</sup>; 3-5 locules with 1-6 seeds per locule; fruit matures September-October at which time the fruit lobes split revealing the orange aril<sup>15,10,20</sup>, releasing seeds through January<sup>18</sup>; cold moist stratification of the seeds is required for 1-3 months<sup>5</sup>; seeds are dispersed by birds<sup>5</sup>.

## WINGED BURNING BUSH



UGA2307068



UGA2307067

*Euonymus alatus* (Thunb.) Sieb.

**Habitat:** Indigenous to northeastern Asia and central China<sup>10,20,5</sup>; escaped cultivation and established in open areas, such as prairies<sup>1</sup> and woodlands<sup>6,19,8,9,5,7</sup>; appears to prefer sunny conditions, though it does well in deep shade with no effect on fall's red foliage; prefers well-drained soils but is sensitive to drought; USDA plant hardiness zones 4-9<sup>5</sup>, with a possible preference for the more northern of these zones due to dormancy requirements<sup>12</sup>.

**Comments:** Used extensively in ornamental plantings; the "Compatus" cultivar is among the most popular<sup>5,4</sup>; tends to grow slowly and in short spurts<sup>5</sup>; may dominate the understory of mature forests<sup>6</sup>; possible medicinal properties include cytotoxic activity against tumor cells<sup>14,17</sup> and treatment against stomach aches<sup>11</sup>; a few pathogens, such as two-spotted-mites<sup>16,5</sup> and nematodes may minimally affect it<sup>5</sup>; dieback may be caused by the fungus *Whetzelinia sclerotiorum*; overwintering host of the bean aphid (*Aphis fabae*)<sup>22</sup>.

**Similar Native Species:** Wahoo (*E. atropurpureus*), autumn leaf color is yellow; strawberry bush (*E. americanus*), flowers are 5-merous<sup>10</sup>.