

Arnold Hawthorn (Crataegus arnoldiana)

General Description

Broadly rounded, low-branched tree with wide-spreading, horizontal branches which are densely set. This species performs well in North Dakota. Attractive white flowers and red fruit, thorny stems.

Leaves and Buds

Bud Arrangement - Alternate, sessile.

Bud Color - Round or oblong-ovoid, with about 6 exposed fleshy and bright red to reddish-brown scales.

Bud Size - Small.

Leaf Type and Shape - Simple, broadly-ovate, pubescent below.

Leaf Margins - Sharply-serrate above the entire base.

Leaf Surface - Fairly smooth, pubescent below.

Leaf Length - 1 to 3 inches.

Leaf Width - 3/4 to $1\frac{1}{2}$ inches.

Leaf Color - Dark glossy green; yellow fall color.

Flowers and Fruits

Flower Type - Perfect, 1/2 to 2/3 inch in diameter, borne in 2 to 3 inch diameter, flat corymbs.

Flower Color - White, disagreeable odor, pink anthers.

Fruit Type - Pome, 1/4 to 1/2 inch in diameter.

Fruit Color - Bright red, glaucous.

Form

Growth Habit - Branches are upright to horizontal, broadly rounded in form.

Texture - Medium, summer; medium, winter.

Crown Height - 15 to 20 feet.

Crown Width - 15 to 20 feet.

Bark Color - Gray to brown.

Root System - Fibrous, spreading.

Environmental Requirements

Soils

Soil Texture - Adapted to a variety of soils. Soil pH - 5.5 to 8.0. Windbreak Suitability Group - 1, 1K, 3, 4, 4C, 5, 6D, 6G.

Cold Hardiness

USDA Zone 3.

Water

Prefers well-drained soils. Moderately drought tolerant.

Light

Full sun.

Uses

Conservation/Windbreaks

Large shrub or small tree for field and farmstead windbreaks, and riparian plantings.

Wildlife

Used for nesting sites by many songbirds. Fruit is utilized by song and game birds. Browsed by deer.

Agroforestry Products

Food - Fruit is used fresh or processed.

Medicinal - Contains amygdalin and alkaloid crataegin which is used as a cardio-diuretic tonic. Used as an astringent in a decoction for sore throats.

Urban/Recreational

Specimen, screen and parks. Well-adapted to environmental stresses. Tolerates the soot and grime of cities.

Cultivated Varieties

Homestead Hawthorn (*Crataegus arnoldiana* 'Homestead') - Released by USDA-NRCS, Plant Materials Center, Bismarck, North Dakota. A cultivar seed strain.

Related Species

Downy Hawthorn (Crataegus mollis)

Snowbird Hawthorn (C. x mordenensis 'Snowbird')

Thornless Cockspur Hawthorn (*C. crus-galli* var. *inermis*) - Excellent small landscape tree.

Pests

No major insect problems. Cedar-hawthorn rust causes some disfiguration of the leaves, but it does not limit the usefulness of this selection.