

Dryopteris erythrosora Autumn Fern, Japanese Shield Fern, Japanese Wood Fern¹

Edward F. Gilman, Ryan W. Klein, and Gail Hansen²

Introduction

This finely divided, dark green fern has a delicate appearance but is actually a very hardy survivor. Its slowly spreading habit and ability to tolerate neglect make it an ideal candidate for use as a groundcover. This underutilized plant is one of the few ferns to have seasonal color value; the fronds appearing reddish when young. It combines well with *Mahonia fortuneii* and holly fern for a mixed planting in a shady location. It will grow to about 18 inches tall with single plants spreading no more than 24 inches.



Figure 1. Full Form - *Dryopteris erythrosora*: Autumn Fern, Japanese Shield Fern, Japanese Wood Fern Credits: Edward F. Gilman, UF/IFAS



Figure 2. Leaf - *Dryopteris erythrosora*: Autumn Fern, Japanese Shield Fern, Japanese Wood Fern Credits: Edward F. Gilman, UF/IFAS

General Information

Scientific name: *Dryopteris erythrosora*

Pronunciation: dry-OP-teer-iss air-rith-roe-SOR-uh

Common name(s): autumn fern, Japanese shield fern, Japanese wood fern

Family: Aspleniaceae

Plant type: herbaceous; perennial

USDA hardiness zones: 5 through 11 (Figure 3)

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Planting month for zone 7: year round

Planting month for zone 8: year round

Planting month for zone 9: year round

Planting month for zone 10 and 11: year round

Origin: not native to North America

Invasive potential: not known to be invasive

Uses: mass planting; edging

Availability: somewhat available, may have to go out of the region to find the plant



Figure 3. Shaded area represents potential planting range.

Description

Height: 1 to 2 feet

Spread: 1 to 2 feet

Plant habit: upright

Plant density: moderate

Growth rate: slow

Texture: fine

Foliage

Leaf arrangement: most emerge from the soil, usually without a stem

Leaf type: bipinnately compound

Leaf margin: lobed

Leaf shape: oblong

Leaf venation: pinnate; none, or difficult to see

Leaf type and persistence: evergreen

Leaf blade length: less than 2 inches

Leaf color: purple or red

Fall color: no fall color change

Fall characteristic: not showy

Flower

Flower color: no flowers

Flower characteristic: no flowers

Fruit

Fruit shape: unknown

Fruit length: unknown

Fruit cover: unknown

Fruit color: brown

Fruit characteristic: inconspicuous and not showy

Trunk and Branches

Trunk/bark/branches: not applicable

Current year stem/twig color: not applicable

Current year stem/twig thickness: not applicable

Culture

Light requirement: plant grows in the shade

Soil tolerances: clay; sand; acidic; loam

Soil salt tolerances: poor

Plant spacing: 18 to 24 inches

Other

Roots: not applicable

Winter interest: no special winter interest

Outstanding plant: plant has outstanding ornamental features and could be planted more

Pest resistance: no serious pests are normally seen on the plant

Use and Management

Requiring shady conditions, autumn fern grows in any good forest loam and has good drought tolerance. It can withstand an hour or two of direct sun. California ratings state autumn fern is accepting of temperatures ranging from 109°F down to 3°F. Its slow growth habit makes the plant expensive to purchase but it is well worth it. This is truly a no-maintenance plant. Plant on 12 to 18inchcenters to establish a solid ground cover. Fronds can be cut and used in vases for indoor greenery but will last only three or four days.

Propagation is by division or by spores.

Pests and Diseases

No pests or diseases are of major concern.