NOTEWORTHY COLLECTIONS

ARIZONA

MIRABILIS TENUILOBA S. Watson (NYCTAGINACEAE). — Yuma Co., Borrego Canyon, vicinity of Borrego Tank, SE side of Tinajas Altas Mountains, locally common in canyon bottom, especially just above the tank, perennials, the leaves succulent and yellowish green, ca. 2 km SSE of Tinajas Altas, vicinity 32°17′30″N, 114°03′W, elev. ca. 460 m, 16 June 1992, Felger and Broyles 92-613 (ARIZ, ASU, MO, RSA, TEX, UC). Sympatric with Mirabilis bigelovii var. bigelovii; other associated perennials are Acacia greggii, Agave deserti ssp. simplex, Ambrosia ilicifolia, A. dumosa, Asclepias albicans, Bebbia juncea var. aspera, Brickellia atractyloides, Bursera microphylla, Cheilanthes parryi, Crossosoma bigelovii, Ditaxis lanceolata, Echinocereus engelmannii var. acicularis, Encelia farinosa, Ephedra aspera, Eriogonum wrightii var. pringlei, Fagonia laevis, Ferocactus cylindraceus, Galium stellatum var. eremicum, Hibiscus denudatus, Horsfordia newberryi, Hyptis emoryi, Jatropha cuneata, Justicia californica, Larrea divaricata, Lotus rigidus, Machaeranthera pinnatifida ssp. gooddingii, Mammillaria grahamii, Nolina bigelovii, Opuntia basilaris, O. acanthocarpa, O. bigelovii, Peucephyllum schottii, Physalis crassifolia, Pleuraphis rigida, Pleurocoronis pluriseta, Prosopis glandulosa var. torreyana, Salazaria mexicana, Stipa speciosa, Tridens muticus, and Viguiera parishii.

Previous knowledge. Known from Western Colorado Desert in California (Munz, A flora of Southern California, 1974), the eastern desert slopes of Baja California (Shreve and Wiggins, Vegetation and flora of the Sonoran Desert, 1964) and two adjacent islands (Moran, in Case and Cody, Island biogeography in the Sea of Cortéz, 1983), and as a disjunct population in the Sierra del Rosario in northwestern Sonora (Felger, Desert Plants 2(2):87–114, 1980).

Significance. First collection from Arizona. This population and the one in the Sierra del Rosario, 28 km to the SW, are the only records for this species east of the Colorado River; both are on steep granitic slopes. The species diversity is considerably greater at the Arizona locality and many of the associated plants, including *Mirabilis bigelovii*, are not present in the Sierra del Rosario.

-RICHARD FELGER, Drylands Institute, 2509 North Campbell Ave. #176, Tucson, AZ 85719.

TEUCRIUM GLANDULOSUM Kellogg (LAMIACEAE).—Pinal Co., Picacho Mts., ca. 13 km E of Eloy, T8S, R9E, sect. 15 NE¼, in the drainage of a steep, rocky (granite) canyon, with Acacia greggii, Hyptis emoryi, Keckiella antirrhinoides, and Stachys coccinea, 880 m, 23 Mar 1992, J. F. Wiens 92-174 and G. Joseph (ARIZ, ASU), determined by P. D. Jenkins; T8S, R9E, sect. 19 S½, in a steep, rocky (granite) canyon, with Cercidium microphyllum, Ephedra nevadensis, Herissantia crispa, and Janusia gracilis, 700 m, 21 Apr 1992, J. F. Wiens 92-356 (ARIZ, ASU, ASDM); T8S R9E, sect. 27 NW¼, on an exposed granite peak, with Bouteloua curtipendula, Ericameria laricifolia, and Eriogonum wrightii, 1263 m, 21 Apr 1992, J. F. Wiens 92-369 (ARIZ, ASU).

Previous knowledge. Previously known from southern California, Baja California, and western Arizona in Mohave Co. (Kearney and Peebles, Arizona flora, 1960) and

in Yuma Co. (Horse Tanks, Castle Dome Mts., 1937 A. A. Nichols ARIZ; Cabeza Prieta Tanks, Cabeza Prieta Mts., 1962 N. M. Simmons ARIZ).

Significance. A range extension of 235 km ENE of the Cabeza Prieta Mts., and 260 km E of the Castle Dome Mts., into the northeastern Sonoran Desert. First record for this species in Pinal Co.

-John F. Wiens, 16920 W. Placita Manana, Marana, AZ 85653.

CALIFORNIA

SCIRPUS HETEROCHAETUS Chase (CYPERACEAE).—Tehama Co., Wilson Lake near NW shore, S side of Wilson Lake Rd ca. 4 km E of California Highway 36/89, T29N, R5E sect. 28, ca. 1608 m; extensive stand emergent in shallow water near the shore and extending somewhat into the lake, partly associated with Nuphar polysepalum Engelm.; 5 Aug 1978, Rubtzoff 9246 (CAS).

Previous knowledge. Widespread but local in temperate North America where known mainly in the East. West of the Continental Divide it is known only from one collection from western Montana, several from northern Idaho, and one or two from southern Oregon. The supposed occurrence in Washington (Hitchcock et al., Vascular plants of the Pacific Northwest 1:377, 1969) is apparently based on two incorrectly identified specimens (WTU!). The previously published occurrence nearest to California is in southern Oregon: "Swan Lake, Klamath County" (Abrams, L., Illustrated flora of the Pacific States 1:274, 1923); "Swamps, Klamath Co." (Peck, M. E., A manual of the higher plants of Oregon, 2nd ed., 1961, p. 148). The Oregon reports apparently are based on the collection(s): Klamath Co., "Swan Lake Valley, 14 July 1895" (US!), and/or "Chinax Camp, Swan Lake, 14 July 1896" (CAS!, WILLU!), Elmer Applegate 759.

Significance. This first California record extends the known range ca. 220 km southward from Swan Lake in Oregon. Swan Lake with the adjacent Swan Lake Valley is located ca. 35 km north of the California border. This rare tule, with spikelets separate, floral scales smooth, stigmas 3, achenes strongly trigonous and prominently beaked, and perianth bristles 4(5) and unequal, is often mistaken for the common S. acutus Muhl. ex Bigelow or S. validus Vahl (S. tabernaemontani Gmelin s. lat.).

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IDAHO, MONTANA AND WASHINGTON

GALIUM PEDEMONTANUM (Bellardi) All. (RUBIACEAE).—IDAHO, Clearwater Co. near Orofino, pasture, T36N R2E SW¼, sect. 27, L. Puchalski 7-90 (IDW*); Idaho Co. Nez Perce Indian Reservation, 2 km S of Stites along Highway 14, 15 Jun 1988, R. Old s.n. (IDW); Nez Perce National Forest, 15 km SE of Lowell along Selway River, June 1987, R. Old s.n. (IDW); Lewis Co. S slope Lawyer Canyon, T33N, R2E, sec. 12, common in plots of crupina herbicide trial, 29 May 1991, L. Lass s.n. (IDW, WS). MONTANA, Missoula Co., Ninemile Valley 5.5 mi NE of Alberton, 10 May 1974, V. H. Vincent 127 (ID). [* IDW = Plant Materials Collection, Department of Plant, Soil, and Entomological Sciences, University of Idaho.]

Previous knowledge. Native to southern and central Europe from Portugal to the Ukraine (Tutin et al., Flora Europaea, Vol. 4: Plantaginaceae to Compositae [and Rubiaceae], 1976). It is naturalized in WV, KY, and TN (Fernald, Gray's manual of botany, 8th ed., 1970) and has recently been introduced into the Northwest. The species has become a weed in parts of western MT and northern ID.

Significance. Not included in the Flora of the Pacific Northwest (Hitchcock and Cronquist, Flora of the Pacific Northwest, 1973) due to its recent introduction. A description is given below to aid in identification.

Galium pedemontanum (Bellardi) All., Auct. Fl. Pedem. 2, 1789. Valantia pedemontana Bellardi, Oss. Bot. 61, 1788.

Cruciata pedemontana (Bellardi) Ehrend., Notes Roy. Bot. Gard. Edinb. 33:396, 1958.

Annual. Stems 1–7 dm tall, erect or ascending, slender, subterete with 4 prominent angles or quadrangular, simple or somewhat branched from the base, rough and adhesive, with small recurved prickles and numerous patent hairs, sometimes only below the nodes; internodes 2–5 mm long. Leaves in whorls of 4, ovate to elliptical, 1.5–3 times as long as broad, strongly reflexed, obtuse to acute, slightly hairy above, hirsutely ciliate along veins of basal ½ of leaf below, 1-veined, 3–11 × 2–4 mm, uniformly light yellowish-green; lateral veins obscure; margins revolute. Inflorescence in whorls of short axillary cymes; cymes ebracteolate, much shorter than the subtending leaves, (1–)2–3-flowered; peduncles and pedicels hirsute, 1.5–2.0 mm long, partly deflexed under the leaves, in fruit reflexed but not coalescing nor encircling the fruit. Flowers perfect, actinomorphic, 0.5–1.0 mm long; calyx absent; corolla yellowish-green, rotate, 4-lobed, ca. 1 mm in diameter; ovary inferior; styles united in lower third; stigma capitate. Fruit dry, reniform, dark brown, glabrous but finely warty, 1.0–1.5 mm long, with 1 or 2 oblong-cylindric mericarps.

Galium pedemontanum may be distinguished from other annual members of the genus as listed in Hitchcock and Cronquist (1973) by its cymose inflorescence and leaves in whorls of 4. Galium bifolium S. Wats. has leaves in whorls of 2–4 but has solitary flowers. Galium parisiense L., G. aparine L. and G. tricornutum Dandy all have leaves in whorls of 5–8 (Hitchcock and Cronquist 1973).

-Joseph E. Laferriere, Joy D. Mastrogiuseppe, and Richard R. Old, see below.

BRYONIA ALBA L. (CUCURBITACEAE).—IDAHO, Bingham Co., along Interstate 15 north of exit 108, 24 Aug 1986, Old s.n. (ID, WS); Lake Co., 0.8 km north of Utah line on Highway 89, Old s.n. 23 Aug 1986 (ID, WS); Franklin Co., 3 mi east of Franklin, 19 Aug 1984, Johnson and Brunsfeld 2248 (ID); 9 mi east of Preston, 20 Aug 1984, Johnson and Brunsfeld 2278 (ID); Latah Co., 2 mi southwest of Moscow, 27 Jun 1982, Pantone s.n. (ID); 5 mi E of Troy, Claud Lomax s.n. 10 Sep 1989 (WS); Moscow, 17 Jul 1989, D. Pavck and R. Ousterhaut s.n. (IDW*); Moscow, University of Idaho campus, 7 Jun 1990, R. Old s.n. (IDW). Oneida Co., 5 mi east of Malad, 18 Aug 1984, Johnson and Brunsfeld 2211 (ID). WASHINGTON, Columbia Co, Dayton, in city park, 17 Sep 1978, Radebaugh 1 (WS); same location, 23 Sep 1978, Mastrogiuseppe et al. 1556 (WS); near Turner, 24 Jul 1972, Low s.n. (WS); Walla Walla Co., Lewis and Clark State Park, 3 Sep 1985, Gary s.n. (WS); Whitman Co., Alpowa Creek, 8 Mar 1973, Lewke s.n. (WS); Pullman, Maple Street, 2 Sep 1991, Laferrière 2342 (ARIZ, WS); Pullman, near Airport Road, 11 Sep 1985, Simmons and O'Connell s.n. (WS); 1.6 km S of Union Center, 1 Jul 1975, Old s.n. (WS); 1.6 km S of Wilbur Gultch Rd on Ewartsville Rd, 23 Jul 1983, Erteeb 874-F (WS); along highway between Pullman and Moscow, Jul 1986, R. Old s.n. (IDW). [* IDW = Plant Materials Collection, Department of Plant, Soil, and Entomological Sciences, University of Idaho.]

Previous knowledge. Native to southern, central, and eastern Europe (Jeffrey, Kew Bulletin 23:441–461, 1969), has been widely naturalized in the northwestern United States within the last 20 years, and has become a common, conspicuous weed in Idaho, Utah, Montana, and southwestern Washington [Northam et al., New weed species and potential weed problems identified in northern Idaho during 1984. In: L. M. Lish (ed.), Idaho weed control research report, pp. 276–278, 1984]. The species tends to spread rapidly once established since the seeds are disseminated by birds

and probably by water flow (Engle, The spread and effect of the vine *Bryonia alba* in Whitman County, Washington. M.S. thesis, Department of Botany, Washington State University, Pullman, 1988).

Significance. The species is not included in the Flora of the Pacific Northwest (Hitchcock and Cronquist 1973) because of its relatively recent introduction. A description is therefore given below to aid in identification.

Bryonia alba L., Sp. Pl. 1012, 1753.

Herbaceous, monoecious, perennial vine to 7 m, hispid-papillose, climbing by means of unbranched tendrils. Roots tuberous. Leaves 5–15(–20) cm long, usually ovate but occasionally broader, cordate at the base, 5-angled or palmately 5-lobed, (1–)1.5–2 times as long as broad, with multicellular trichomes each with a prominent white multicellular base; leaf lobes ovate or triangular, acute to acuminate, sharply dentate, the central 2–3 times as long as the lateral. Staminate inflorescence racemose; pistillate inflorescence in subumbellose fascicles. Flowers: calyx shortly-campanulate, 5-dentate, the teeth subulate to triangular; corolla yellowish- to greenish-white, almost rotate, deeply 5-lobed, the lobes oblong; stamens 3 in staminate flowers; filaments free; two stamens bithecous, the third monothecous, the loculi linear, flexuous; pistillate flowers with 3–5 often almost obsolete staminodes; ovary with 3 placentas; rudimentary ovary lacking in staminate flowers; style nude at the base or inserted on an annular disk, slender, 3-branched; stigmas 3, glabrous; ovules numerous, horizontal. Fruit a black, juicy berry, 7–10 mm in diameter. Seeds 2–6(–8), lacrymate, slightly flattened, approximately 2 mm thick, 3–4 mm wide × 4–5 mm long.

Bryonia alba may have been introduced into North America through commercial seed trade. It was formerly cultivated as a medicinal plant in Europe (Tutin et al., Flora Europaea, Vol. 2: Rosaceae to Umbelliferae, 1968) and was available in 19th century seed catalogs in the U.S. (Mack, R. N., Economic Botany 45:257–273, 1991). It has been present in the Northwest since at least 1970 and is found generally along water courses, on roadsides, and in towns (Engle 1988). The oldest known record from the United States is a collection from New Jersey in the 1880's (Engle 1988). The seeds are apparently bird-dispersed. The fruits are eaten by robins and pheasants, usually in the spring after the fruits have been frozen, although the fruits and roots contain alkaloids toxic to humans (Engle 1988). The vines climb and cover shrubs and small trees and may cause damage to their supporting plants by shading them (Engle 1988).

Bryonia may be distinguished from other northwestern members of the Cucurbitaceae by the following key, modified after Hitchcock and Cronquist (1973):

- a Fruit 7–8 mm in diameter, spherical, juicy; central lobe of each leaf twice as long as lateral lobes, the blade usually deltate to ovate; stamens free Bryonia
- a' Fruit 3-8 cm long, ovate to elliptic, dry at maturity; central lobe of leaf more or less equal in length to lateral lobes, the blade ovate to orbicular; stamens connate
 - b Plants annual; roots fibrous; seeds rough, flattened; flowers 6-merous Echinocystis

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OREGON

BRIZA MAXIMA L. (POACEAE).—Curry Co., Oak Flat, along Illinois River 3 mi up from Rogue River, T35S R11W S29, open stony soil w/ weedy grasses, ca. 55 m, 14

May 1987, Dimling 5 (ORE); Rte. 101 near Hunter Creek Rd. and mouth of Hunter Creek, ca. 6 air km S of town of Gold Beach, T37S R15W S12 SE¼, ca. 75 plants, occasional weed in vicinity, grassy roadside near ocean, ca. 40 m, 9 Jun 1991, Zika and Stansell 11178 (NY, OSC); beach access, Airport Rd., town of Gold Beach, T36S R15W S36, naturalized weed, 20 April 1992, Moore s.n. (OSC); Lane Co., City of Florence, E side of rd. at N end of Hwy 101 bridge over Siuslaw R., T18S R12W S34, NE¼, dry grassy fill slope above parking area, ca. 10 m, Sep 1990, B. Newhouse and R. Brainerd 1 (OSC).

Significance. First records outside of cultivation in Oregon.

CAREX SAXATILIS L. var. MAJOR Olney (CYPERACEAE).—Wallowa Co., Eagle Cap Wilderness, Wallowa-Whitman National Forest, Frances Lake, headwater cirque of Lake Cr., Lostine River drainage, Wallowa Mts., ca. 12 air km SW of town of Joseph, T3N R44E S18 SE¼ of SE¼ and S19 NE¼, 10–15 clonal plants, ca. 500 stems, peaty boggy saturated shores and creekmouths, sometimes in shallow water on E, S and SW margins of Frances Lake, at timberline, over a variety of bedrock substrates, including Jurassic/Triassic Martin Bridge formation limestone and Hurwal formation sedimentary rocks, associated with mosses, Eleocharis pauciflorus and Equisetum variegatum, ca. 2350 m, 31 Jul 1992, Zika and Alverson 11809 (OSC).

Significance. First record for the species and variety in Oregon. Fills a gap in the stated range between Clallam Co., WA and Elko Co., NV (Hitchcock et al., Vascular plants of the Pacific Northwest, part 1: Vascular cryptogams, gymnosperms, and monocotyledons, 1969). Not reported by Peck (A manual of the higher plants of Oregon, 2nd ed., 1961); absent in Mason (Guide to the plants of the Wallowa Mountains of northeastern Oregon, 2nd ed., 1980).

Centranthus Ruber (L.) DC. (Valerianaceae).—Curry Co., S breakwater, E and W of Rte. 101 bridge, mouth of Rogue River, town of Gold Beach, T36S R14W and T36S R15W, est. 20,000–30,000 plants, abundantly naturalized and flowering on rock fill and grassy disturbed bank of river, also a weed in vacant lots in town, full sun, with Alnus rubra, Baccharis pilularis, Festuca arundinacea, Lathyrus latifolius, Luzula campestris, Melilotus sp., Salix scouleriana, and many weedy herbaceous species, 10–20 m, 9 Jun 1991, Zika and Stansell 11180 (NY, ORE, OSC, VT); W of Rte. 101 bridge, mouth of Rogue River, town of Wedderburn, T36S R14W, 1000's of flowering plants, 9 Jun 1991, observed by Zika and Stansell; Lane Co., City of Eugene, near Willamette and 6th St., T17S R3W S30, 100 flowering plants, escaped and becoming weedy in cracks in asphalt parking lot and along edge of building, with Acer circinatum and Rubus laciniatus, 128 m, 27 Jan 1988, Zika 10444 (ORE, OSC).

Significance. First records outside of cultivation in Oregon. The population at the mouth of the Rogue River has increased dramatically in the last ten years, according to Veva Stansell.

GEUM URBANUM L. (ROSACEAE).—Benton Co., City of Corvallis, Pioneer Park, T12S R5W S2, N side of the Marys River just E of the Southern Pacific Railroad tracks, in shade of Acer macrophyllum at edge of mowed grassy area, ca. 67 m, 5 Jul 1992, Alverson 1598 (OSC); Multnomah Co., City of Portland, NE slope of Sentinel Hill, below junction of Fairmount Blvd. and Marquam Hill Rd., Portland, T1S R1E S9, along dirt track in disturbed second growth forest of Pseudotsuga menziesii, Acer macrophyllum, and Alnus rubra, with Geum macrophyllum, ca. 240 m, 17 Jul 1990, Alverson 1563 (OSC); Washington Co., Canyon Crest Dr., ca. 2 km SW of Sylvan, T1S R1W, ca. 75 plants, well established weed in hedgerows and garden edges, with Carex deweyana, Epilobium watsonii and Taraxacum officinale, ca. 180 m, 27 Jun 1991, Zika and Christy 11226 (OSC).

Significance. First published records of this European species for Oregon. This is a fairly common and well established weed of disturbed forests in the West Hills district of Portland.

Juncus Triglumis L. var. Albescens Lange (Juncaceae). — Wallowa Co., Eagle Cap Wilderness, Wallowa-Whitman National Forest, Frances Lake, headwater cirque of Lake Cr., Lostine River drainage, Wallowa Mts., ca. 12 air km SW of town of Joseph, T3N R44E S19 NE¼, ca. 30 plants, peaty boggy saturated shore, SW margin of Frances Lake, near treeline, Jurassic/Triassic Hurwal formation sedimentary rocks, associated with mosses, Carex aurea, C. capillaris, C. scirpoidea, C. subnigricans, Eleocharis pauciflorus, Equisetum variegatum, Polygonum viviparum, and Thalictrum alpinum, ca. 2350 m, 31 Jul 1992, Zika and Alverson 11808 (OSC).

Significance. First record for this species and variety in Oregon. A circumboreal rush recorded 250 km to the SE in the Sawtooth Mts. of ID by Hitchcock et al. (op. cit.). Not reported by either Peck (op. cit.) or Mason (op. cit.).

JUNIPERUS VIRGINIANA L. (CUPRESSACEAE). — Lane Co., City of Eugene, Willow Creek Natural Area, S of West 18th 0.3 km W of Bertlesen Dr., T18S R4W S3, scattered plants over at least 50 ha., established weed for more than ten years, wet prairie invaded by Fraxinus latifolia and other woody plants, ca. 125 m, 9 Nov 1991, Zika and Alverson 11440 (OSC).

Significance. This is the first record outside of cultivation in Oregon. Ornamental specimens were introduced in the Willamette Valley prior to the 1950's. Apparently bird dispersed and widely though sparsely distributed in the West Eugene area.

LIMNANTHES ALBA Benth. (LIMNANTHACEAE).—Lane Co., along Meadowview Rd., 3.2 km W of Hwy. 99, T16S R5W S25, damp gravelly roadbanks, S aspect, full sun, with Sanguisorba minor, ca. 105 m, 27 Apr 1988, Zika 10473 (OSC); N end of Greenhill Rd., T16S R4W S20, gravelly roadside, ca. 105 m, 23 April 1992, Zika 11496 (OSC); E side of Hwy. 99, 2.8 km E of Eugene airport, T17S R4W S5, NE¹/₄, and in a continuous population for the next 6 km N to Junction City, est. 30,000 plants, gravelly roadside, ca. 100 m, 29 Apr 1992, Zika 11508 (OSC); Linn Co., along the W side of I-5, 0.8 km N of milepost 225, T12S R3W S21, growing on the gravelly road shoulder, ca. 80 m, 9 May 1987, Alverson 1077 (OSC); N side of Tangent Dr. 100 m E of Seven Mile Lane, 4.8 km E of Tangent, T12S R3W S10, 14 May 1988, Rasmussen 54 (OSC); Marion Co., along Riches Road across from the Victor Point fire station, 8.0 km S of Silverton, T7S R1W S11, roadside fencerow in open grassland, ca. 190 m, 2 May 1987, Alverson 1069 (OSC).

Significance. First published records outside of cultivation in Oregon; native to California. This species has been bred as an oil-seed crop, and is cultivated on wet clay soils in the Willamette Valley. Roadside populations may be ruderal colonies dispersed by farm machinery or trucks transporting seeds between fields and storage facilities.

Trifolium angustifolium L. (Fabaceae).—Douglas Co., BLM 15.0 Rd., T24S R4W S15, roadside weed, with Trifolium variegatum, 14 Jun 1978, Crowder 417 (Roseburg BLM herbarium); Powell Point, Umpqua River, 1978, M. Thiele obs.; Powell Point, Umpqua River shore, town of Tyee, T24S R7W S30, ca. 75 m, 15 May 1987, Hopkins et al. M84 (Douglas County Museum); Myrtle Island RNA, Umpqua River at end of Cougar Cr. Rd., 7.3 km W of Bullock Bridge at State Hwy. 138, Alnus-Fraxinus/Rubus/Phalaris community, rare, naturalized, 24 Jun 1988, Thompson et al. 88-1053 (OSC); Hastings Ave., 0.2 km W of Rte. 99, town of Sutherlin, T25S R5W, hundreds of flowering and fruiting plants, sunny waste ground, vernally damp situations, xeric by mid-summer, roadside and disturbed grassy areas N of road, with Bromus mollis, Cichorium intybus, Festuca arundinacea, Lotus corniculatus, Parentucellia viscosa, Rumex crispus, Vicia cracca and other weeds, ca. 155 m, 13 Jun 1991, Zika and Thiele 11206 (NY, ORE, OSC); Lane Co., upper Spencer Creek drainage N of the Lorane Highway just S of the Eugene city limit, T18S R4W S11, near moist draw in open grassland on S facing slope, ca. 230 m, 12 Jun 1991, Alverson 1583 (OSC); SE margin of Short Mountain landfill, N of Camas Swale Creek,

T18S R3W S36, wetland edges and along service roads, common, ca. 150 m, 6 Feb 1992, Zika 11447A (OSC).

Significance. First records for Oregon.

TRIFOLIUM HIRTUM All. (FABACEAE).—Jackson Co., U.S. Army Corps of Engineers Rogue River Project, Applegate Reservoir, W Shore of reservoir, upper Applegate River drainage, 23 air km SSW of Ruch, T41S R4W S2 SW¼ of NW¼, common weed in open second growth woods of Pinus ponderosa, Pseudotsuga menziesii, Quercus kelloggii, Quercus chrysolepis, ca. 615 m, 7 Jun 1991, Zika 11171 (OSC); S shore of E arm of Applegate reservoir, upper Applegate River drainage, 23 air km SSW of town of Ruch, T41S R4W S1 NE¼ of NW¼, ca. 30 plants, weed in open second growth Pinus ponderosa woods along hiking trail, with Bromus tectorum, Madia sp., Pseudotsuga menziesii, Quercus kelloggii, Triteleia hendersonii and Vulpia microstachys, ca. 615 m, 10 Jun 1991, Zika 11193 (NY, OSC); Rte. 238 roadside, town of Ruch, T38S R3W, 100–200 plants, disturbed sunny ground on bank of mowed ditch, ca. 500 m, 7 Jun 1991, Zika 11172A (OSC); Corner of Kirtland Rd. (E end) and Pacific Rd., ca. 1 km S of Rogue River, T36S R2W S13, common weed in grassy areas, with Bromus tectorum, ca. 365 m, 7 May 1992, Zika 11527 (OSC).

Significance. First records outside of cultivation for Oregon. Apparently introduced to stabilize roadbanks around Applegate Reservoir during its construction (1976–1980). Now invading open and partially shaded habitats in the vicinity; potentially a troublesome weed.

Field work supported by a grant from the Native Plant Society of Oregon.

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Lepidium Heterophyllum Benth. (Cruciferae).—OREGON: Benton Co., Corvallis, O.S.U. campus. 21 May 1927, Hyslop s.n. (OSC); same locality, 20 Jun 1932, H.M. Gilkey s.n. (OSC); Linn Co., Albany, along Interstate Hwy. 5 by a pond formed by Truax Creek, in gravelly soil with Poa, Rubus, Bromus, Rumex, Chrysanthemum, Daucus, T10S R3W sect. 33, 60 m, 23 May 1991, R. R. Halse 4146 (OSC, MO, NY, US); Marion Co., Salem, along Turner Road by Salem Airport, in gravelly, rocky soil with Rubus, Holcus, Festuca, Bromus, Daucus, Dactylis, T8S R3W sect. 1 or 12, 63 m, 16 May 1991, R. R. Halse 4142 (OSC, CAS, MO, NY). WASHINGTON: Pierce Co., about 7 airline miles SW of Puyallup, near the junction of Canyon Rd. E and 176th St. E, gravelly, rocky soil with Teesdalia, Plantago, Trifolium, Rubus, T19N R4E sect. 31, 146 m, 8 May 1991, R. R. Halse 4132 (OSC, NY, MO, WS, WTU).

Previous knowledge. In North America Lepidium heterophyllum, a native of western Europe, has been known only from Vancouver Island, British Columbia, Canada (Scoggan, The Flora of Canada 3:835, 1978).

Significance. First record for the United States and a southward range extension of about 430 km from Vancouver Island, B.C.

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OREGON AND WASHINGTON

ABUTILON THEOPHRASTI Medic. (MALVACEAE).—OREGON, Multnomah Co., Linnton, near Portland, 28 Sep 1910, Suksdorf 1632 (WS). WASHINGTON, Klickitat Co., Bingen, Jul 1885, Suksdorf 1842 (WS); same locality, 10 Oct 1927, Suksdorf 12355 (WS); same locality, weed in garden, 6 Jul 1924, Suksdorf 11750 (WS). Kittitas Co., 9 Oct 1989, C. McKinney s.n. (IDW*). Lewis Co., Toledo, 7 Sep 1982, Lampitt

s.n. (WS); Centralia, 8 Oct 1976, Magnuson s.n. (WS). Skagit Co., Sedro Wooley, 23 Sep 1977, Morgan s.n. (WS). Thurston Co., Rochester, 31 Jul 1989, M. McKay s.n. (IDW); same locale, 28 Sep 1989, M. McKay s.n. (IDW). [* IDW = Plant Materials Collection, Department of Plant, Soil, and Entomological Sciences, University of Idaho.]

Previous knowledge. Native to India, southeastern Europe, and the Mediterranean (Tutin et al., Flora Europaea, Vol. 2: Rosaceae to Umbelliferae, 1968; Kearney, Leaflets of Western Botany 7:241–254, 1955). It was cultivated as an ornamental and as a potential fiber crop in the United States and has escaped to become a weed in parts of Washington and Oregon (Roché, Pacific Northwest Extension Publication PNW368).

Significance. Not included in the Flora of the Pacific Northwest (Hitchcock and Cronquist 1973). A description is given below to aid in identification.

Abutilon theophrasti Medic., Künstl. Geschl. Malv.-Fam. 28, 1787.

Herb annual, erect, 25–240 cm tall, from a taproot. Stems cylindric, simple or sparsely branching above, velvety-tomentose with glandular hairs above, pubescent with simple and stellate hairs below. Leaves simple, alternate, stipulate, cordateorbicular, acuminate, slightly crenate, long-petiolate, green and covered with stellate hairs above and below, 10-15 cm long, 7-20 cm wide. Inflorescence of small cymes of 1-6 flowers in axils of upper leaves; peduncles shorter than petioles but as long as or longer than the flowers; pedicels jointed above middle. Flowers regular, perfect; epicalyx lacking; sepals 5, united to just below middle, the lobes oblong-oval, mucronate, with midnerve prominent at base, densely stellate, often with glandular hairs; petals 5, obovate, yellow to yellow-orange, slightly notched at apex, 7-13 mm long; stamens numerous, the filaments united into a tube for most of their length, the column conic; ovary superior; stigmas terminal, capitate. Fruit a schizocarp; mericarps 12-15, arranged in a single whorl, exceeding the calyx, black, hirsute, with a slender erect to slightly spreading aristate beak, each with several seeds, blackish with a yellowish waxy coat, usually dehiscent in situ and not separating readily from central axis. Seeds reniform, finely tuberculate, ca. 4 mm across.

Abutilon may be distinguished from other genera of the Malvaceae by its hirsute, several seeded mericarps (Tutin et al. 1968). Several other species are known from other parts of North America, from which A. theophrasti may be recognized by the latter's tomentose herbage (Kearney 1955).

-Joseph E. Laferriere, Joy D. Mastrogiuseppe, and Richard R. Old, see below.

WASHINGTON

ANTHRISCUS SYLVESTRIS (L.) Hoffm. (APIACEAE).—Spokane Co., southwest corner of Newman Lake, abandoned hayfield/pasture area, ponderosa pine/Douglas fir forest, T26N R46E sect. 10, 11 May 1990, Roché and Nielsen 1472 (WS); Whitman Co., north of Colfax, on south side of Crumbacher Rd., between road and pasture, 14 Jun 1991, Roché 1488 (WS).

Previous knowledge. Native to Europe, North Africa, and temperate Asia and naturalized from Newfoundland and Quebec to New Jersey (Fernald, Gray's manual of botany, 8th ed., 1970). It has recently become established in eastern Washington and classified as a Class A noxious weed in the state (Roché, PNW Extension Bulletin 367, 1991).

Significance. Hitchcock and Cronquist (Flora of the Pacific Northwest, 1973) mention the plant but do not provide a description. A description is given below to aid in identification.

Anthriscus sylvestris (L.) Hoffm., Gen. Umb. 40, 46. t. 1. f. 19., 1814. Chaerophyllum sylvestre L., Sp. Pl. 258, 1753.

Erect, hairy biennial or perennial herb forming offsets. Roots fusiform, slightly thickened. Stems erect, hollow, deeply furrowed, pubescent at the nodes below, glabrous and branching above. Leaves triangular, 2–3-pinnately compound, somewhat pubescent beneath, slightly pubescent to glabrous above, up to 30 cm long; sheaths with short spreading hairs along nerves; leaflets ovate, pinnatifid and coarsely serrate, with scabrous margins. Umbels compound, terminal, the earliest often overtopped by lateral branches, 2–6 cm in diam.; peduncles (3–)6–12, glabrous, 1–4 cm long; involucre lacking; bracteoles 4–6, ovate, aristate, ciliate, often pink, spreading or deflexed, 2–5 mm long; pedicels about equalling bracteoles at anthesis but elongating at maturity. Flowers 3–4 mm in diam.; calyx minute or lacking; petals white, notched, with an inflexed point, the peripheral slightly elongated. Fruit oblong-ovoid, smooth, 5–10 mm long, with a short beak; commisures constricted; carpels subterete, tapering into a long beak; ridges confined to the beak; styles slender, spreading.

Anthriscus sylvestris may be distinguished from A. scandicina (Weber) Mansfeld by the former's short-beaked, ribless fruit.

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REVIEW

The Natural History of Puget Sound Country. By ARTHUR R. KRUCKEBERG. 1991. University of Washington Press, Seattle and London. xxiv + 468 pp. \$29.95.

Puget Sound country—as defined by Seattle botanist Arthur Kruckeberg, who has lived in it for over four decades—is the 10,000 square mile drainage basin whose waters run into that "grand inland sea . . . so lavishly endowed by Nature," located in northwestern Washington state and southwestern British Columbia. This region includes some of the most spectacular scenery in the hemisphere—the Cascade and Olympic ranges, large freshwater lakes, a complex geology, and the intricate waterways of the Sound itself.

At the time of the first extensive exploration of the Sound by George Vancouver's expedition in 1792, the "audaciously rich cultures" of coastal Indians in the region lived in a state of "accommodation, not overkill" as a way of life. The forests were vast, the rivers and streams pure, and the seas abounded with a seemingly endless supply of food. Kruckeberg argues, however, that this status of apparent harmony with nature stemmed not from an aboriginal "kindness" to the land, but was a consequence of lack of intent or necessity to overexploit local resources. In contrast, the first Europeans to settle in the region early in the 19th century were there precisely to exploit its natural bounty. According to the author, "Puget Sound country after . . . the 1850s was so cataclysmically altered and with such unanimity of purpose that no single voice of conscience would have effectively stemmed the onslaught of the land."

Kruckeberg's intent in this book is not to chronicle the destruction of the biota and landscape of Puget Sound country. Rather, his aim is to describe the natural



Felger, Richard Stephen et al. 1993. "NOTEWORTHY COLLECTIONS." *Madroño;* a West American journal of botany 40, 178–186.

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