

The *Boxwood* Bulletin

A quarterly devoted to Man's oldest garden ornamental



An old photo taken at Montpelier, the home of President James Madison in Orange County, Virginia, shows topiary forms of boxwood in the walled garden. See story on page 61. (Photo: The Garden Club of Virginia)

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The American Boxwood Society

The American Boxwood Society is a not-for-profit organization founded in 1961 and devoted to the appreciation, scientific understanding and propagation of the genus *Buxus* L. There are more than 800 members in the United States and nine foreign countries.

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Memberships for the year May through April include \$12 for four quarterly issues of *The Boxwood Bulletin*:

Individual	\$15	Contributing	\$30	Life	\$250
Family	\$20	Sustaining	\$50	Patron	\$500

Non-member subscriptions for groups and institutions, such as botanic gardens and libraries, are \$15 by the calendar year.

Available Publications:

Back issues of <i>The Boxwood Bulletin</i>	\$ 4
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<i>International Registration List of Cultivated Buxus L.</i>	\$ 3
<i>Index to The Boxwood Bulletin 1961-1986</i>	\$10

Contributions:

Gifts to the Society are tax-deductible and may be undesignated or applied to:

Boxwood Handbook Fund
Boxwood Memorial Garden Fund
Boxwood Monograph Fund
Boxwood Research Fund

Correspondence:

For address changes, memberships, dues, contributions, or to order back issues or publications, write:

Treasurer, The American Boxwood Society
P.O. Box 85, Boyce, Va. 22620

For general information about the Society, advice concerning boxwood problems or cultivar selection, write to The American Boxwood Society at the same address. You are also welcome to write directly to the President:

Mrs. Robert L. Frackelton
1714 Greenway Drive
Fredericksburg, Va. 22401

Call for Papers:

Technical articles, news, history, lore, notes, and photographs concerning boxwood specimens, gardens or plantings are solicited for possible publication in *The Boxwood Bulletin*. Photographs should be suitable for reproduction and fully captioned. Suggestions regarding format and content are welcome. Material should be submitted to:

Chairman, Bulletin Committee
1714 Greenway Drive
Fredericksburg, Va. 22401

Material to be returned to the sender must be submitted with a self-addressed envelope carrying suitable postage. Every effort will be made to protect submittals, but the Society cannot be responsible for loss or injury.

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The Boxwood Garden, Princess Anne, Maryland

Sarah Henderson

The Princess Anne Boxwood Garden will be open as part of the Maryland House & Garden Pilgrimage tour of Somerset County on Saturday, May 4. This famous garden, right in the center of the town of Princess Anne, is currently undergoing a gradual reshaping with the ultimate goal a return to the design of the original Victorian formal garden.

In 1842, while on their honeymoon, General George Handy and his wife planned a garden which included a 90-foot square area devoted to parterres edged with boxwood and planted with tulips, anemones, Virginia bluebells, roses, flowering shrubs, a magnolia, and two Temple cedars. A wisteria-covered arbor was the focal point where the paths converged. Over the years, as the boxwood, shrubs, and trees grew and grew, the original design became unrecognizable. Several years ago when Mrs. Aurine Morsell bought the property containing the garden, she knew something had to be done to save it. At that time the *Buxus sempervirens* 'Suffruticosa' hedges had been neglect-

ed and untrimmed for about 40 years. All trace of the original pattern had been obliterated by the growth of the boxwood which had reached heights of 6 to 8 feet. Ivy was rampant in some parts of the garden and some of the boxwood was dying for lack of air and sunlight.

Through Princess Anne neighbors, Mrs. Morsell found Ms. Kathy T. Brown, a North Carolina State graduate with a degree in landscape horticulture and an interest in historical gardens, who agreed to undertake the project. The first step in the restoration was to begin a five- or six-year plan to gradually cut back the boxwood. The first year a foot and a half was taken off, and at two subsequent cuttings a bit more has been taken to the present height of about 3 feet. With each cutting the boxwood has put out healthy new growth where it has been trimmed down. Several more cuttings will take the garden to the original design height of about 2 feet.

Finding the pattern was another challenge. Mrs. Morsell and K. T.

Annual Meeting

The ABS annual meeting will be held May 14-15. For details, see page 66.

Membership Renewal

This year, envelopes for membership renewal for the upcoming year will be mailed separately, and not enclosed with the *Bulletin*, as in the past.

New Addresses

ABS postage costs are escalating. Not only are rates higher, but when a *Bulletin* is mailed to an obsolete address, the ABS is charged 35 cents for the forwarding address, and the *Bulletin* is not returned, thereby incurring the cost of a complete new mailing. Please inform the ABS promptly of a change of address!



The Boxwood Garden, Princess Anne, as photographed in the early 1940s, showing trimmed boxwood



1990 photo showing new growth on trimmed boxwood

Brown crawled on hands and knees to find the original paths. These were weeded and layered with stones and the patterns emerged. The perennials which had grown into the pathways were moved back into the beds, and new perennials and shrubs were planted so that each parterre has its own color. This makes each section stand out. Low maintenance and successive bloom were also considerations in plant selection. Camellia, azalea, crape myrtle, redbud, witch hazel, yucca, hosta, lirioppe, black-eyed Susan, fox gloves, veronica and coral bells were some of the plants chosen.

The huge Japanese cedars (*Cryptomeria*) were another problem. These had taken over one side of the garden and were casting too much shade on the boxwood, but since the cedars were two of the largest specimens of their kind in the state, Mrs. Morsell felt she could not cut them down. Instead, she has had them trimmed to let in as much sun and air as possible. An unexpected bonus from the sun and air was the resurgence and bloom of the old tulips, daffodils and columbine planted years ago.

Another decision had to be made regarding the very center of the garden. In times past, first a gazebo and then a fountain had been there. Mrs. Morsell decided on a large antique Victorian urn, which goes well with the design, requires little upkeep, and is big enough to be in keeping with the scale of this garden.

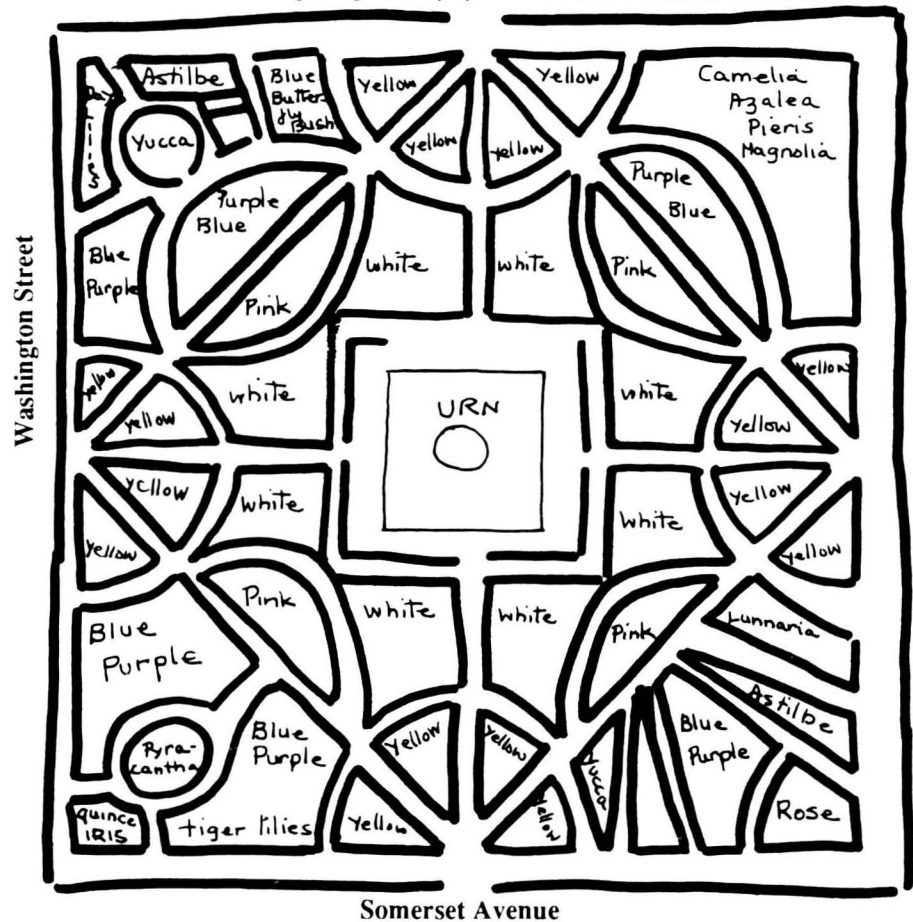
A regular maintenance schedule includes spraying for red spider mites, fertilizing, and mulching. Mrs. Morsell says she waters when she can, but as boxwood is tough, the clipped-down garden came through the drought of 1989 with little trouble.

Replanting the areas where the boxwood has died out is still ahead, but aside from that the final cuttings, the restoration of the garden is complete. Mrs. Morsell is delighted with the results as are the people of Princess Anne. She says, "The Boxwood Garden belongs to the town's history



1990 photo shows crape myrtle in the center of a boxwood parterre and Victorian urn in left background. (All photos: Maryland House and Garden Pilgrimage.)

Living Designs, Kathy Tyndall Brown, Rt. 1 Box 82, Pocomoke, Md. 21851





Boxwood at Godlington Manor, to be shown on a Pilgrimage tour April 28.



Woodbrook, the Zink home in Baltimore County, showing some of the boxwood on two levels.

and I'm the caretaker."

Sunday, April 28, is the day set for the Kent County tour. Boxwood is a traditional feature in the gardens of the handsome 18th-century brick houses in Chestertown and in the gardens of the charming waterfront houses in the outlying Langford Creek area. One, Godlington Manor, has remained in the same family for nine generations. It is famous for its formal boxwood garden.

Houses in the Baltimore County suburb of Woodbrook, an area with a rural feeling close by the city of Baltimore, will be open Friday, April 26. These houses are handsomely furnished and most contain collections reflecting the interests of their owners. Boxwood has been used extensively in the landscaping of this unique area. One garden has two levels of boxwood descending to a woodland stream.

Additional Maryland House & Garden Pilgrimage tours will take place in eight other counties, and is scheduled from Saturday, April 13 through Sunday, May 5. Tour books with full information will be available after March 15. For a pre-tour copy, send your name, address, and \$2.00 to Maryland House & Garden Pilgrimage, 1105-A Providence Rd., Towson, Md. 21204 or call (301) 821-6933.

Historic Garden Week in Virginia, a Sampling

Montpelier, the home of President James Madison and his wife Dolley, was begun by Madison's father in 1755. It was enlarged by President Madison and altered by successive owners including William duPont whose daughter Marion left it to the National Trust.

The present 2700 acres represent more than half the original land-grant patent given to the Madison family in 1723. There is a two-and-one-half-acre walled formal garden.

Restoration of the formal garden was begun in October 1990 with funding provided by the Garden Club of Virginia. A planned two-year project, the emphasis will be on re-establishing an early 20th century garden. The old boxwood lining the



Montpelier, in Orange County, Virginia, was the estate residence of President James Madison. (Photos: Mrs. Robert L. Frackelton, except as noted)



Entrance to 2 1/2-acre walled garden at Montpelier



Walled garden and one of the specimen boxwood formerly trained to a topiary



In the Montpelier herb garden, a central planter has a unique copper cap for winter protection.



A tall boxwood hedge along one side of the walled garden at Montpelier



The walk in the walled garden is bordered by a boxwood hedge.



A 1940s photo shows how boxwood hedges were trimmed at Ash Lawn-Highland. (Photo: Ash Lawn-Highland staff)



Current photo shows boxwood plantings taking on earlier shape. (Photo: Ash Lawn-Highland staff)



The French chateau-style Basset home in Martinsville features boxwood. (Photo: The Garden Club of Va.)



Boxwood plants line the walks at Chester. (Photo: The Garden Club of Va.)

center walk is being preserved. Formerly, there was a good bit of topiary in the upper level of the walled garden.

Ash Lawn-Highland, the home of James Monroe (1799-1823) has an abundance of *Buxus sempervirens* and *Buxus sempervirens* 'Suffruticosa'. A 1795 entry in Monroe's account book, before his return from France, notes payment for "the boxes in the garden."

It is not known exactly when the garden was installed or whether it was the work of Monroe or a later owner.

The boxwood had been allowed to grow without benefit of trimming during most of the 20th century, but pruning has begun under the direction of Curator James E. Wootten. Although still large, the boxwood are

beginning to have the configuration of ninety years ago.

The Carrara marble statue, a focal point in the garden, is of James Monroe by Attilio Peccirilli and was unveiled in 1930.

The Bassett home in Martinsville, Virginia is a stately French Chateau-style house, constructed in 1968 on a corner lot, with formal gardens, cutting gardens and terraces. One of the uses of boxwood here is to accent the French style entrance.

Chester is located in Albemarle County, Virginia. It is a Greek Revival house built in 1847 by Joseph C. Wright, a retired landscape architect from England who named the estate after his native city.

In March 1865, wounded Major James Hill was at Chester when General Sheridan occupied Scottsville. He and Colonel George Custer visited Major Hill and decided not to arrest the apparently dying man. Major Hill survived, became a general and was later editor of the Scottsville *Courier*.

The grounds were planted in 1847 as a typical English park garden. Presently, in addition to 42 varieties of trees including the largest Norway spruce and the second largest holly tree in Virginia, there are large stands of boxwood.

Sources: Charlotte Massie, *The Garden Club of Virginia*, and James E. Wootten, *Ash Lawn-Highland*.

CORRESPONDENCE

November 29, 1990
Mr. Lynn R. Batdorf
U.S. National Arboretum

Dear Mr. Batdorf:

I must apologize for not contacting you earlier on the status of the boxwood evaluation project. The cuttings of all nine cultivars have successfully rooted and are in very good health. We have included our boxwood selection in the project to compare it alongside the other cultivars. The parent plants have been under evaluation for approximately eight years and continue to do exceptionally well. These plants are similar in habit and leaf character to *Buxus* 'Green Velvet', and average 27 inches tall by 50 inches wide.

I realized too late that we did not receive the cuttings of *Buxus microphylla* var. *japonica* 'Green Beauty' that Bill Gray arranged to have sent. If we can obtain these additional cuttings next season we should still be on schedule.

Please contact me if you would like any additional information on the status of the cultivars, or have any comments on the project in general. Thank you and best regards.

Richard G. Hawke
Plant Evaluation Coordinator

January 31, 1991
Mrs. Joan Butler
The American Boxwood Society

Dear Mrs. Butler:

Thank you for your letter of January 11th and your inquiries about the project. I am enclosing a summary of the propagation report [next page] for your information. We never received cuttings of *Buxus microphylla* var. *japonica* 'Green Beauty', as arranged by Mr. Gray. I am enclosing copies of my letter to Mr. Batdorf and the letter from Mr. Gray regarding this matter.

If I can provide any additional information about the project please let me know. I would like to know whether we should expect the missing cuttings to be sent this year. Thank you.

Richard G. Hawke
Plant Evaluation Coordinator

February 19, 1991
Mr. Richard G. Hawke
Chicago Botanic Garden

Dear Mr. Hawke:

Thank you for your letter of January 31 and the excellent table [next page] showing the results of propagation of the nine cultivars which we sent to you.

We regret that the tenth cultivar, *Buxus microphylla* var. *japonica* 'Green Beauty' was never sent to you. Thank you for substituting your 'Chicagoland Green' in its place. Would you be willing to send us any background information on this cultivar? For an article in *The Boxwood Bulletin*, it would be interesting to know its parentage, previous experience of hardiness and any other historical data.

Do you wish to try to include some other cultivar as a tenth candidate in your study? The Boxwood Society of the Midwest, growing boxwoods at the Missouri Botanical Garden and in private gardens in the St. Louis area, has recently developed a list of plants which they recommend unconditionally for their climate. One possibility might be *Buxus microphylla* 'Sunlight', a seedling selected before 1974 by Dr. J. T. Baldwin at the College of William and Mary. It has a crinkly, yellow-green leaf a little like 'Curly Locks', but will grow faster, I believe. If you do not have a connection of your own at the MBG, you might write to Mr. Robert E. Bowden, Director of Horticulture. He has been working closely with the members of the Boxwood Society of the Midwest.

It is possible that the nursery no longer grows 'Green Beauty'. I personally was not pleased with the inclusion of that cultivar in the study; it is a rangy plant with few characteristics to recommend it to gardeners, except rapid growth.

Another fine plant is *Buxus microphylla* 'John Baldwin', an upright shape with small leaves and blue-green color. It grows slowly at first, but then begins to send up "thrusters" which, if left in place, subsequently fill in with lateral growth.

I note with interest your comment that the rooted cuttings of 'Graham Blandly' and 'Pyramidalis' were pinched. I am enclosing copies of photographs of these plants as mature specimens at the U.S. National Arboretum and in a private garden. If the upright shoots of these plants are removed, they will not exhibit their characteristic habit of growth. 'Graham Blandly' especially is a most unusual plant in that all side shoots, even small ones, soon turn upward and grow vigorously in a vertical direction. It is this process which produces the very tight, narrow mature outline which is its most noticeable effect. I realize that to a grower unfamiliar with these cultivars the vigorous upright growth which begins as soon as roots have formed, may seem an aberration. I am only an amateur grower of boxwood, but I have grown these two cultivars over a period of 12 years, and I would respectfully suggest that they not be pinched as small plants. A "bushy" 'Graham Blandly' is unnatural.

I hope you will forgive me for these personal observations. They are neither scientific nor objective!

Thank you again for your report. The percentages of successful rooting were also of much interest. We look forward to your next stage of observations.

Mrs. Scot Butler, Secretary

BOXWOOD EVALUATION PROJECT: Propagation Report Chicago Botanic Garden /// Plant Evaluation Program /// January 31, 1991

- Cuttings Received: 2/5/90
- Stick Date: 2/23/90
- Media: Peat:Perlite
- Rooting Hormone: 4000 ppm IBA talc (Hormodin)
- Potting Date: 7/26/90
- Potting Mix: Bark
- Pot Size: SVD2 -2"

Cultivar	Size Range	Ave. Size	Growth Rate	Rooting	Comments
'Chicagoland Green'	3.5 - 7"	3.5"	mod. vigorous	100%	
'Green Velvet'	3 - 5.75"	3.12"	vigorous	100%	
microphylla 'Curly Locks'	4.5 - 5.5"	4.5"	mod. vigorous	90%	
microphylla 'Green Pillow'	1.75 - 3"	2"	slow	50%	fair development
microphylla var. japonica 'Morris Midget'	1.25 - 1.64"	1.25"	very slow	85%	weak development
sempervirens 'Fastigiata'	6 - 7"	6"	mod. vigorous	100%	
sempervirens 'Graham Blandy'	6 - 9"	8"	vigorous	100%	plants were pinched
sempervirens 'Pyramidalis'	5.5 - 8"	6"	vigorous	100%	plants were pinched
sempervirens 'Vardar Valley'	3 - 4"	3"	slow	50%	weak development
sinica var. insularis 'Justin Brouwers'	3.5 - 4.5"	4"	mod. vigorous	80%	full, dense

NOTICES

Workshop

Christine Flanagan of the Blandy staff is announcing plans for a workshop to coincide with the Annual Meeting of The American Boxwood Society. It will be held Tuesday, May 14, 1991, 1-4 p.m. The cost is \$25.00 for non-members of the Friends of the State Arboretum and \$20.00 for members. Ms. Flanagan: "Learn how you can enhance your home landscape by incorporating design aesthetics into the arrangement of trees, shrubs and perennials."

The workshop will focus on the different forms of boxwoods to add definition and interest to garden spaces.

The program includes a tour and discussion in the ABS Memorial Garden with P. D. Larson, Chairman of the ABS Memorial Garden and Elizabeth Sargent, designer of the proposed expanded Memorial Garden. Ms.

Sargent will follow with a slide lecture showing design uses of boxwood.

For reservations send fee to Blandy Experimental Farm, P.O. Box 175, Boyce, Va. 22620 or call (703) 837-1758. Make checks payable to FOSA. Give your name, address and phone number. Ms. Flanagan suggests early reservation. (PLEASE NOTE: This is separate from the ABS Annual Meeting registration which must be made on the enclosed Registration Form.)

Plant Sale

Friends of the Virginia State Arboretum announce their second annual Plant Sale May 11-12, 1991. Slide shows, informational exhibits will be presented and hard-to-find and unusual plants will be offered for sale. Representatives from plant societies will distribute educational materials. Docents will offer tours of the grounds and gardens.

IN MEMORIAM

D. Goodrich Gamble

Goodrich Gamble was well known for his love of boxwood. He was a member of the Boxwood Society of the Midwest and The American Boxwood Society, and attended many annual meetings and outings.

He was the husband of Mary K. Gamble, a founder and past president of the Boxwood Society of the Midwest and a regular contributor to *The Boxwood Bulletin*.

He had a long career as a newspaper editor in St. Louis, and was known as a journalist of absolute integrity. He fought in the Battle of the Bulge and earned four battle stars in the second World War.

Mr. Gamble died at his home on February 20, 1991, after a long illness. He was 85.

31st Annual Meeting of the ABS May 14-15

ABS Annual Meeting
Blandy Experimental Farm of the University of Virginia

PROGRAM

Tuesday, May 14

8:00 p.m. Lecture and Reception - subject to be announced

Wednesday, May 15

9:00 a.m. Registration.

If you pre-register, please pick up your name tag at the Registration Table

9:30 a.m. Guided Tour of the Memorial Garden

10:00 a.m. Coffee, Dining Room

11:00 a.m. Annual business meeting, Library
Recognition of Charter Members on 30th Anniversary of the ABS (followed by a short meeting of the Board to elect two Board members to the Executive Board and to appoint a Nominating Committee Chairman)

12:00 noon Lunch (by reservation or bring your own)

1:00 p.m. Educational program: "Buxus Species and Cultivars" - Mr. Lynn R. Batdorf, International Registration Authority of Cultivated *Buxus* L.

2:00 p.m. Fifth annual auction of named *Buxus* cultivars John W. Boyd, Jr. and Dale T. Taylor

In the January 1991 issue of *The Boxwood Bulletin*, the ABS presented the Part I of a reproduction of an important addition to the taxonomic literature on *Buxus*, titled *Flora: Reipublicae Popularis Sinicae*. Published in China in 1980, it contains taxonomic descriptions of many species and varieties of boxwood found in China, and was translated from the Chinese by two British-born women, Isabel Tasker and Robyn Carter.

The following pages present the second installment of that reproduction.

PROGRAM NOTES

Mr. Batdorf will show slides of many different types of boxwood, and will discuss their characteristics.

Our team of Auctioneer Boyd and Tabulator Taylor will again offer the unusual to collectors and to those with a touch of boxwoodmania.

Anyone with named cultivars for this sale, please notify Mr. Dale T. Taylor, 105 S. Princeton Avenue, Wenonah, NJ 08090, of named plants you will have so that he may prepare the list ahead.

REGISTRATION AND LUNCH

A \$5.00 registration fee will be charged to help defray the cost of refreshments and other meeting expenses.

You may reserve lunch (\$7.00) in advance or bring your own. Those wishing to reserve lunch, please send

your check payable to the American Boxwood Society, in the amount of \$12.00 (lunch and registration) to Mrs. Robert L. Frackelton, 1714 Greenway Drive, Fredericksburg, VA 22401. Please use enclosed Annual Meeting Pre-Registration Form or a facsimile. All lunch reservations MUST be received by Friday, May 3, 1991.

DIRECTIONS

Blandy Farm is on Route 50 near Boyce, Va. Driving west on Route 50, the entrance is on your left about four miles beyond the Shenandoah River bridge. Driving east from Winchester and I-81, the entrance is on the right about 1.5 miles beyond the junction with Route 340.

The entrance is marked from both directions by a highway sign: VIRGINIA STATE ARBORETUM.

SPECIAL SECTION

5. *Buxus myrica* Figure 6: 1 - 6

Lévl. in Fedde, Rep. Sp. Nov. 11: 549. 1913; Gagnep. in Lecte. Fl. Gén. Indo- Chine 5: 662. 1927; Rehd. in Journ. Arn. Arb. 14: 236. 1933; 18: 215. 1937; Hatusima in Journ. Dept. Agr. Kyusyu Univ. 6 (6): 288, f. 7, e-g. 1942; Hainan Journal of Plants 2: 338. 1965; Yunan Journal of Plants 1: 142, figure 35, 18-19. 1977.

var. *myrica*

SHRUB, height 1 - 3 m; BRANCHES terete; BRANCHLETS slender, quadrangular (or the uppermost twigs may appear roundish due to the edges of the outer two opposite sides extend to embrace each other), inner two sides pubescent. LEAVES thinly coriaceous or coriaceous, oblong-lanceolate or narrowly-lanceolate, 3 - 7 cm long, width (0.8 - 1) - 2 cm (rarely elliptical or elliptical-oblong, width up to 2.7 cm), apex acute, acuminate, or obtuse, with a shallow indentation or with a small point protruding, base cuneate, margin curves slightly downwards, midrib protrudes on both sides of the leaf, lateral veins and veinlets commonly clear on both sides, denser and more obvious on the upper leaf surface (there are also cases where the lateral veins are barely visible on the surface, and the lateral veins and veinlets are not clear on the back of the leaf), midrib on the leaf surface and petiole both covered in minute fine hairs; PETIOLE 1 - 3 mm long. INFLORESCENCE axillary, initially 5 mm long, main pedicel very short, extends after flowering, after the male flower has dropped the rachis becomes clavate, sepals ovate, acute, 2 mm long, rachis and sepals pubescent; MALE FLOWERS: about 10, pedicel 1 - 1.5 mm long, piliferous, sepals ovate, 2 - 2.5 mm long, glabrous, rudimentary pistil quadrangular, less than 1 mm high; FEMALE FLOWER: sepals ovate or ovate-elliptical, 3 mm. long. margins commonly scarious, ovary 1.5 mm. long, style flat and wide, 3.5 - 4 mm. long, apex bends outwards, or circinate, stigma narrowly-oblongate, decurrent to the centre of the style or lower. CAPSULE almost spherical, 0.8 - 1 cm. long, persistent style 4 - 5 mm. long, oblique, carpodium 5 - 7 mm. long (sometimes as long as 10 mm.), with many bracts above. Flowering period January - February or March - May, fruiting period May - June or July - September.

Found in sub-central Guizhou (between Pingba, Luodian and Wangmo), western and northern Guangxi, northwestern Yunnan (Yilang), Guangdong (Hainan Island), Hunan and Sichuan; grows by streams, on slopes, and in woods, altitude 250 - 2000 m. Distributed through Vietnam. Type specimens collected from Pingba and Luodian in Guizhou.

var. *angustifolia*. Figure 6: 7 - 8

Gagnep. in Lecte. Fl. Gén. Indo-Chine 5: 662. 1927; Hatusima in Journ. Dept. Agr. Kyusyu Univ. 5 (6): 288. 1942.

Differs from *Buxus myrica* var. *myrica* in the following ways. LEAVES narrowly-lanceolate, 2 - 3.5 (- 4) cm. long, 5 - 7 mm. wide (in Gagnepain's original notes the leaves are said to be 2.5 - 5 cm. long, and 5 - 10 mm. wide, but the leaves of the specimens seen by the author are all slightly smaller), style 2.5 - 3 mm. long, capsule small spherical, 5 - 5.5 mm. long, persistent style approx 3 mm. long, carpodium 6 - 10 mm. long, many bracts above.

Found in south-west Guizhou (Zhenning, Qingzhen), and north-west Guangxi (Tian'e); found beside rivers or in sparse woods. Distributed through Vietnam.

6. *Buxus austro-yunnanensis* Figure 6: 9 - 14

Hatusima in Journ. Dept. Agr. Kyusyu Univ. 6 (6): 286, f. 7, a-d, Pl. 17 (2), f. 1. 1942; Yunnan Journal of Plants 1: 142. Pl. 35, 4-7, 1977.

SHRUB, small, prostrate or upright, height 0.5 - 2.5 m; BRANCHES terete, BRANCHLETS quadrangular, diameter approx 1 mm, pubescent. LEAVES thinly coriaceous, oblanceolate or narrowly obovate, 2 - 3.5 cm long, 7 - 10 mm. wide, apex has a small point protruding or a small indentation, base cuneate, margin curves downwards, midrib prominent on both sides of the leaf, lateral veins and veinlets are dense and distinct on both sides, on the leaf surface the midrib is covered in minute fine hairs or almost glabrous. INFLORESCENCE axillary, later extending, after the male flower has fallen, rachis of the inflorescence becomes clavate, covered in soft sparse hairs; SEPALS ovate, 1 - 2 mm. long, acute, back covered in soft sparse hairs. margin scarious; MALE FLOWERS: approx. 8, pedicels 1 mm long, sepals broadly ovate, 2 - 2.5 mm. long, glabrous, rudimentary pistil approx 1 mm. high, apex enlarged; FEMALE FLOWER: sepals ovate, approx 2 - 2.5 mm. long, glabrous, ovary 1.5 mm. long, style flat and wide, 2.5 - 3 mm. long, apex slightly narrow, only slightly curved or not curved, stigma narrowly-obcordate, decurrent to the centre of the style. CAPSULES spherical 6 - 8 mm. long and wide, persistent style 3 mm. long, upright or slightly oblique, carpodium 6 - 8 mm. long, with many bracts above. Flowering period March - April or September to November, fruiting period September to October or April to May in the following year.

Found in southern Yunnan (Shuangjiang, Lancang, Jinghong); grows beside rivers in fissures in rocks or in thick bush-wood, altitude 480 - 890 m. Type specimen collected near Jinghong, Yunnan.

The male and female flowers of this species are similar to *B. latistyla* Gagnep. and *B. myrica* Lévl., but the leaves are completely different.

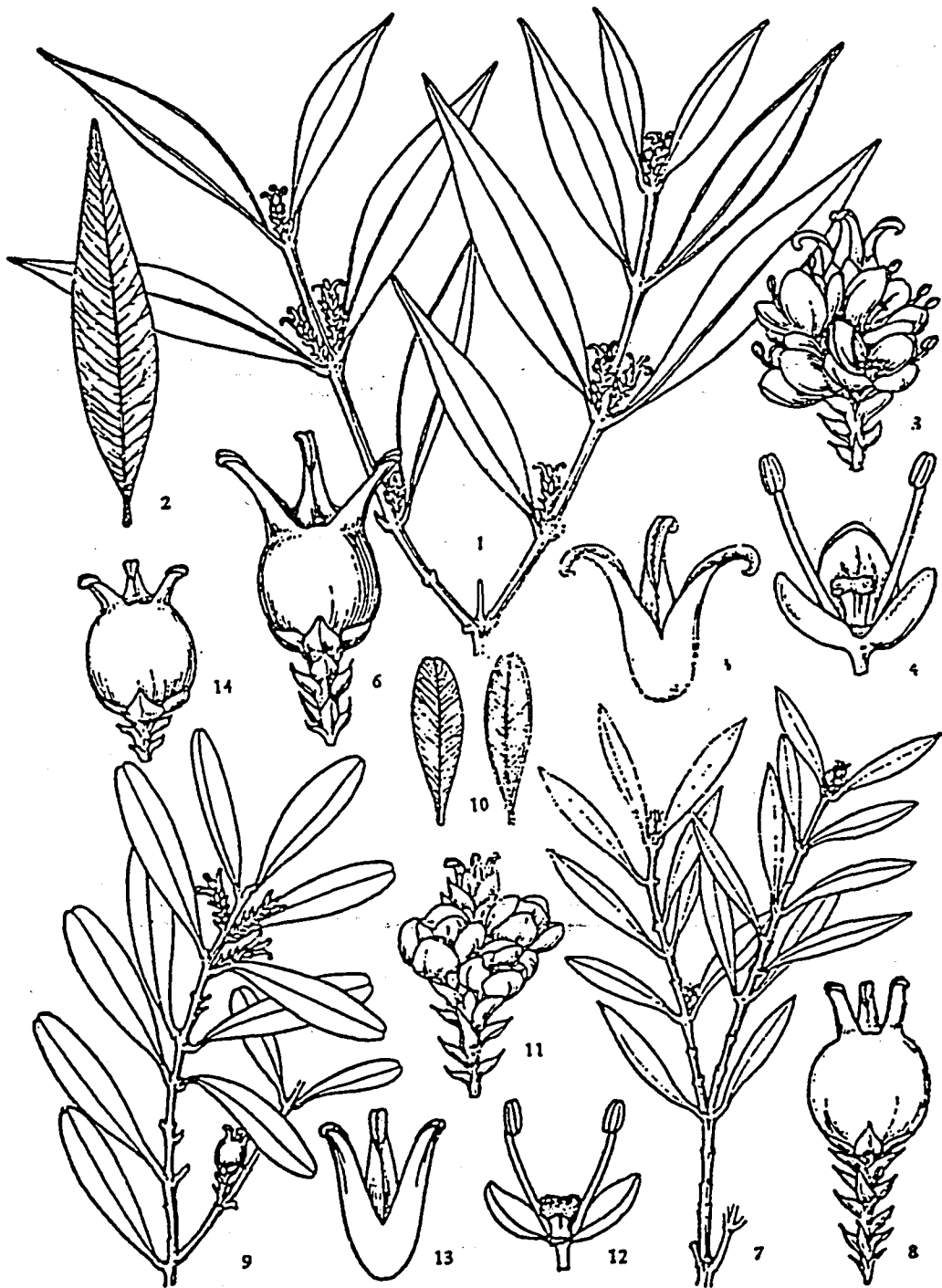


FIGURE 6

1-6. *Buxus myrica* Levl.; 1, Flowering branch; 2, Leaf surface; 3, Inflorescence; 4, Male flower; 5, Pistil; 6, Fruit. 7-8 *Buxus myrica* var. *angustifolia* Gagnep.; 7, Branchlet; 8, Fruit. 9-14. *Buxus austro-yunnanensis* Hatusima; 9, Branchlet; 10, Leaves; 11, Inflorescence; 12, Male flower; 13, Pistil; 14, Fruit. (Drawing: He Dongquan)

7. *Buxus megistophylla*

Levl. Fl. Kouy-Tcheou 160.1914; Gagnep. in Lecte. Fl. Gen. Indo-Chine 5: 661. 1927; Rehd. in Journ. Arn. Arb. 14: 236. 1933; Hatusima in Journ. Dept. Agr. Kyusyu Univ. 6 (6): 284, f. 5. 1942.

SHRUB or small tree, 0.6 - 2 m. high, girth 5 cm.: BRANCHLETS quadrangular (or roundish on the topmost branchlets, with blunt ridges and longitudinal grooves), shiny, glabrous. LEAVES coriaceous or thinly coriaceous, ovate, elliptical- or oblong-lanceolate to lanceolate, 4 - 8 cm. long, 1.5 - 3 cm. wide (rarely, lanceolate leaves reaching a length of 9 cm., or rhomboid-ovate leaves reaching a width of 4 cm), apex acuminate, point blunt or sharp, base cuneate or acute, margin curves downwards, leaf surface shiny, midrib raised on both sides, many lateral veins, forming an angle of 40 - 50 deg. with the midrib, commonly distinct on both sides of the leaf, only the base of the midrib on the leaf surface and the petiole are covered in tiny fine hairs, the rest is glabrous; PETIOLE 2 - 3 mm. long. INFLORESCENCE axillary, rachis 5 - 7 mm. long, pubescent or almost glabrous; BRACTS broadly-ovate, tip acute, with hairs at the base of the underside, margins narrow scarious; MALE FLOWERS: 8 - 10, pedicel approx. 0.8 mm. long, external sepals broadly ovate, approx. 2 mm. long, inner sepals rounded, 2 - 2.5 mm. long, glabrous on the lower surface, length of stamen together with anther approx 6 mm., rudimentary pistil approx 1 mm. high; FEMALE FLOWER: sepals ovate-elliptical, approx. 3 mm. long, glabrous; OVARY 2 - 2.5 mm. long, style upright, approx. 2.5 mm. long, apex slightly curved, stigma obcordate, decurrent to 1/3 of the way down the style. CAPSULE almost spherical, 6 - 7 mm. long, persistent style approx 5 mm. long, oblique. Flowering period March - April, fruiting period June - July.

Found in south-west Guizhou (Zhenning, Luodian), north-east Guangxi (Lingui, Guanyang), north-western Guangdong (the Lian county region), south Hunan (Yizhang), and southern Jiangxi (Anyuan, Huichang); grows in hills, valleys, river banks or wooded slopes, altitude 500 - 1400 m. Type specimen collected from Luodian in Guizhou, and Huangguoshu between Zhenning and Guangling.

The branchlets and leaves of this species are similar to *B. henryi*, but the inflorescence and fruit are clearly different.

8. *Buxus mollica* Figure 7: 1-7

W. W. Smith in Not. Roy. Bot. Gard. Edinb. 10: 16. 1917; Hand.-Mazz. Symb. Sin. 7: 236. 1931; Hatusima in Journ. Dept. Agr. Kyusyu Univ. 6 (6): 294, f. 10, c - g. 1942; Yunnan Journal of Plants 1: 144, figure 35, 8 - 11. 1977. *Buxus wallichiana* Baill. var. *velutina* Franch. Pl. Delav. 136. 1889.

8a. var. *mollica*

SHRUB, height approx 3 m.; BRANCHES roundish; BRANCHLETS almost quadrangular, diameter approx 2 mm., pubescent. LEAVES coriaceous, ovate, oblong or elliptical, rarely oblong-lanceolate, 3 - 5 cm. long, 1.2 - 1.8 (- 2) cm. wide, apex rounded or blunt, with a slight indentation or with a small point protruding, base acute or broadly-cuneate, margin curves downwards slightly, both sides covered in downy short soft hairs, later becoming almost glabrous, upper leaf surface opaque or slightly shiny, reverse dull, midrib slightly raised on both sides, lateral veins not distinct on either side; PETIOLE 1 - 2 mm. long, pubescent. INFLORESCENCE axillary, terete; approx. 1 cm. long, rachis somewhat extended, 3 - 4 mm. long, densely pubescent, bracts ovate-triangular, approx. 1.5 mm. long, acute, the back covered in soft sparse hairs; MALE FLOWERS: approx. 6 - 8, without pedicels, sepals rounded, approx. 2 mm. long, reverse side protuberant, with soft sparse hairs, rudimentary pistil extremely short; FEMALE FLOWER: sepals ovate-triangular, approx. 3.5 - 4 mm. long, ovary and style of equal length; style linear-cordate, decurrent almost to the base of the style. CAPSULE ovoid, 1 cm. long, shiny, persistent style 3 mm. long, upright, apex curves outwards, persistent sepals at the base of the fruit 4 mm. long. Flowering period February - March, fruiting period August - October.

Found in north-western Yunnan (Ninglang, Yongsheng, Binchuan, Lijiang) in the forests of the Jinsha River valley; altitude below 1780 m. Type specimen collected in Lijiang, Yunnan.

8b. var. *glabra*

Hand.-Mazz. Symb. Sin. 7: 236. 1931; Hatusima in Journ. Dept. Agr. Kyusyu Univ. 6 (6): 295, f. 10, a - b. 1942; Flora Yunnanensis 1: 144. 1977.

Differs from var. *mollicula* in that the branchlets and leaves are glabrous, or only the lower half of the midrib on the leaf surface has minute fine hairs.

Found in north-western Yunnan (the north of Lijiang county) and south-western Sichuan (Muli county); altitude 1780 - 2100 m. Type specimen collected in the Jinsha river valley in the north of Lijiang.

As far as we know, var. *mollicula* and var. *glabra* are only to be seen between Muli in Sichuan and Binchuan in Yunnan (longitude 100 - 101 deg. East, latitude 25 - 28 deg. north), the area of distribution is extremely narrow.

9. *Buxus hebecarpa* Figure 8: 1 - 5

Hatusima in Journ. Dept. Agr. Kyusyu Univ. 6 (6): 302, f. 14. 1942.

SHRUB, height 3 m.; BRANCHES terete; BRANCHLETS quadrangular, densely pubescent, internodal length 1.5 - 2.5 cm. LEAVES thickly coriaceous, ovate, elliptical or



FIGURE 7

1-7, *Buxus mollicula* W.W.Smith: 1. Fruiting branch; 2. Leaf stem bearing infantile inflorescence; 3. Leaf of *Buxus mollicula* var. *glabra* (showing the faint raised pinnate markings on either side of the midrib); 4. Part of the leaf of *Buxus mollicula* var. *mollicula* (showing the pubescence on the reverse side of the leaf); 5. Inflorescence in the early stages; 6. Fruit; 7. One section of the fruit (with a seed); 8-11 *Buxus ichangensis* Hatusima: 8. Fruiting branch; 9. Leaf; L: upper surface R: reverse; 10. Male flower; 11. Fruit. (Drawing: He Dongquan)

oblong-ovate, rarely lanceolate, 3 - 6 (- 7) cm. long, 1.5 - 2 (- 2.5) cm. wide, apex acute or acuminate, base cuneate, margins curve downwards, leaf surface shiny or dull, midrib very prominent on the upper surface, somewhat smooth on the back of the leaf, lateral veins clearly visible on the upper surface but not noticeable on the back of the leaf, the midrib on the upper surface and the petioles are covered in minute fine hairs; PETIOLES 2 - 3 mm. long. INFLORESCENCE axillary, capitate, rachis 4 mm. long, bracts mainly opposite, ovate, basal flowerless bracts relatively small, dense, bracts situated below the male flower broadly-ovate, approx 2 mm. long, rachis, bracts and outside of the sepals all have light minute sparse soft hairs; MALE FLOWERS: 6 - 1 [sic], pedicel 0.5 - 0.8 mm. long, covered in sparse soft hairs, outer sepals broadly-ovate, inner sepals rounded, each one 2 - 2.5 mm. long, length of stamen and anther together 4.2 mm., rudimentary pistil has a short terete stalk, tip enlarged, 1 - 1.2 mm. high; FEMALE FLOWER: outer sepals slightly narrow, inner sepals broadly-ovate, 2 - 2.5 mm. long, ovary 2.2 mm. long, closely covered in minute fine felt-like hairs, style robust, 1.2 mm. long, stigma obcordate, broad, upper part protrudes beyond the style, decurrent nearly to the base of the style. CAPSULES spherical, 7 - 9 mm. long, covered in minute fine feltlike hairs, persistent style over 2 mm. long, oblique, sometimes adhering to the surface of a fruit. Flowering period March, fruiting period June.

Found in Mount Emei in Sichuan and Tianquan Erlang mountains; grows in forests or on rocks, altitude 1600 - 2000 m. Type specimen collected in Mount Emei.

Only under the magnifying lens can it be seen that there are sparse minute fine hairs on the fruits found in Tianquan. When Hatusima first described this species, the existence of the Tianquan plants was not known, and neither had the male and female flowers been seen; the present text adds this supplementary information.

10. *Buxus rugulosa* Figure 8: 6 - 10

Hatusima in Journ. Dept. Agr. Kyusyu Univ. 6 (6): 303, f. 15, a-b, Pl. 22(7), f. 2. 1942; Flora Yunnanensis 1:145, figure 35, 12-14. 1937.—*B. microphylla* Sieb. et Zucc. var. *platyphylla* (Schneid.) Hand.-Mazz. Symb. Sin. 7: 237.1931, excl. syn.

10a. ssp. *rugulosa* var. *rugulosa*

SHRUB, height 1 - 2 m.; BRANCHES almost terete; BRANCHLETS quadrangular, diameter 1 - 2 mm., pubescent on all four sides, or two opposite sides glabrous. LEAVES coriaceous, rhombic-oblong, oblong or narrowly-oblong, rarely elliptical, 1.5 - 2.5 (- 3.5) cm. long, 6 - 12 mm. wide, apex blunt, round or retuse, base acute or cuneate, margin curves downwards, leaf surface shiny, midrib

prominent, when dried shows no lateral veins, reverse smooth, not lucid, or with slight rugosity, midrib has minute fine hairs on leaf surface; PETIOLE 2 - 3 mm., densely pubescent. INFLORESCENCE axillary and apicillary. capitate, rachis 3 - 4 mm. long; BRACTS ovate, 2.5 - 3 mm. long, both with hairs; MALE FLOWERS: 8 - 10, pedicels 0.5 - 1 mm. long, outer sepals ovate, inner sepals nearly rounded, 2 - 3 mm. long, glabrous, when dry has red-brown lines or pale yellow colour, tip of the rudimentary pistil is expanded, approx. 1 mm. high; FEMALE FLOWER: sepals broadly ovate, 2.5 - 3 mm. long, reverse pubescent, ovary approx. 3 mm. long, style robust, approx. 1.5 mm. long, stigma obcordate, decurrent to the middle of the style. CAPSULES ovoid, 8 - 10 mm. long, glabrous, persistent style oblique, 2 - 3 mm. long. Flowering period March - May, Fruiting period June - September.

Found in north-western Yunnan (Deqin and Lijiang to Weishan) and Sichuan (Maerkang and Jinzhuan); grows beside streams and in mountain bush-wood, altitude 1900 - 3500 m. Type specimen collected at an altitude of 3000 m. in the vicinity of Lijiang.

This variety can show considerable variation in amount of hairs on the branchlets, leaf-size, presence or absence of lateral veins and rugosity on the leaf surface, length of pedicel of male flower and of rudimentary pistil. Those found in Dali in Yunnan: four sides of the branchlet pubescent, pinnate markings only to be seen on the leaf surface, no lateral veins, length of pedicel of male flower reaches over 1 mm., rudimentary pistil sessile, and has an enlarged capitulum: those found in Lijiang: two external sides of the branchlet are glabrous, leaf surface either shows only rugosity, or has obvious lateral veins; those found in Maerkang in Sichuan: branchlets glabrous on two external sides, leaf surface shows rugosity, no lateral veins, male flower subsessile, rudimentary pistil has a clearly terete stalk, height inclusive of enlarged tip reaches 1 mm. This variety has close affinities with *Buxus sinica* (Rehd. et Wils.) Cheng, and the one that grows in Maerkang seems to be a transitional form between the two.

var. *prostrata* Figure 8: 11-12

(W. W. Smith) M. Cheng, comb. nov.—*Buxus microphylla* Sieb. et Zucc. var. *prostrata* W. W. Smith in Not. Roy. Bot. Gard. Edinb. 10: 16, 1917; Hand.-Mazz. Symb. Sin. 7: 237, 1931.—*Buxus regulosa* var. *intermedia* Hatusima in Journ. Dept. Agr. Kyusyu Univ. 6 (6):305, f. 15, c-j, 1942, syn. nov.—? *Buxus regulosa* ssp. *prostrata* (W. W. Smith) Hatusima, l. c. 306, f. 16. 1942; Flora Yunnanensis 1: 145, 1977.

SHRUB, height 30 - 120 cm.; ramose; BRANCHLETS covered in minute fine dense felty hairs. LEAVES elliptical, obovate-elliptical or oblong, 8 - 11 (- 14) mm. long, 5 - 8 mm. wide, apex rounded or with a retuse, base acute or with

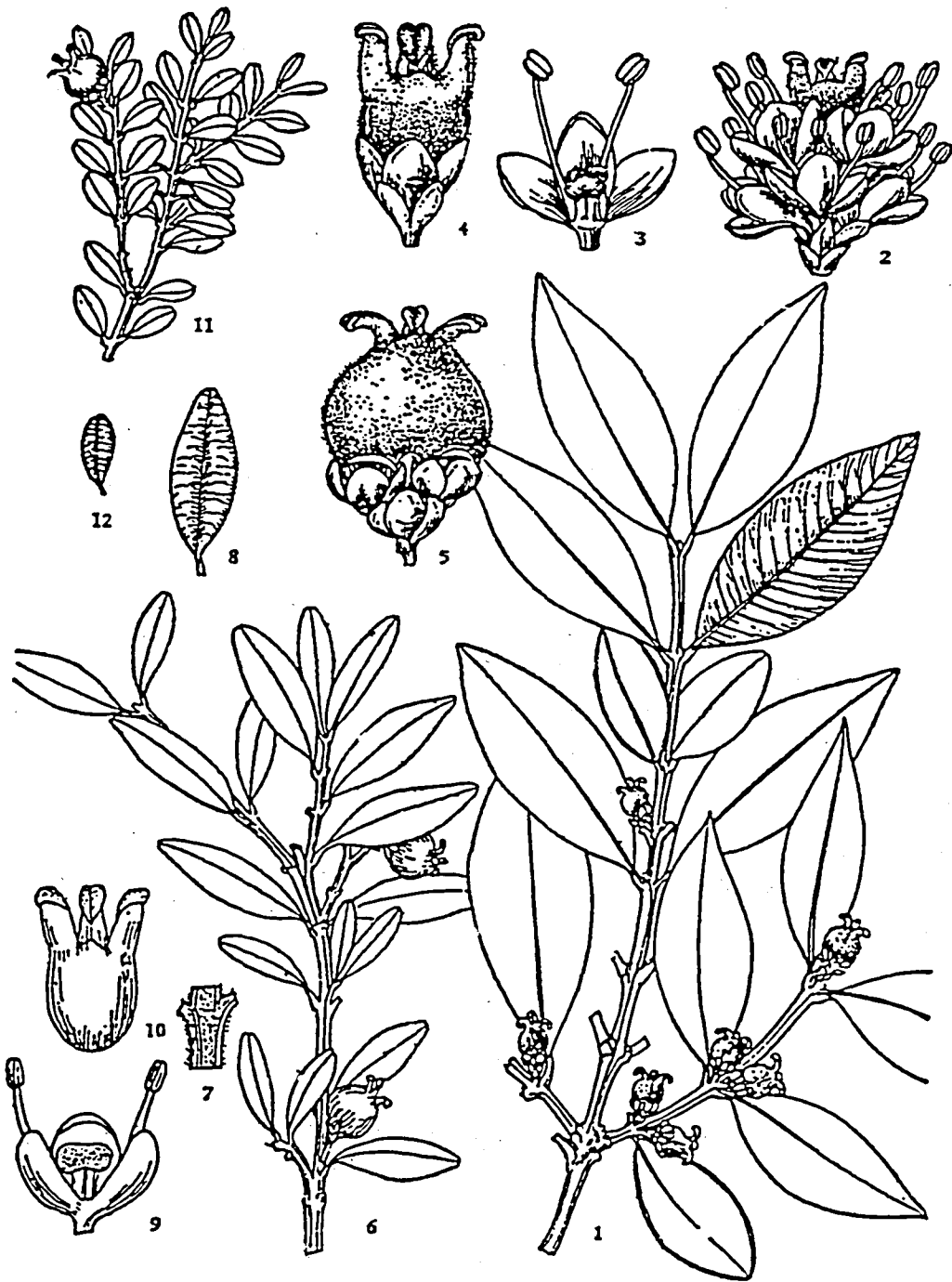


FIGURE 8

1-5, *Buxus hebecarpa* Hatusima; 1, Fruiting branch; 2, Inflorescence; 3, Male flower; 4, Female flower; 5, Fruit. 6-10, *Buxus rugulosa* Hatusima; 6, Fruiting branch; 7, One section of a branchlet (showing pubescence); 8, Leaf surface (showing wrinkles); 9, Male flower (stamen and some sepals removed); 10, Pistil (gradually becoming infantile fruit). 11-12 *Buxus rugulosa* var. *prostrata* (W.W.Smith) M. Cheng; 11, Fruiting branch; 12, Leaf surface (showing lines). (Drawing: He Dongquan)

slight rounding, on a small number of leaves the lateral veins show, the rest only show pinnate markings after the leaf has been dried, the midrib on the leaf surface is covered in minute fine hairs; PETIOLES hairy on the upper surface and on the margins. MALE FLOWERS: pedicel approx. 1 mm. long, sepals approx 2 mm. long, rudimentary pistil approx. 1 mm. high. CAPSULE 7 mm. long, glabrous, persistent style 2 - 3 mm. long (length of fruit together with persistent style 9 - 10 mm.). Flowering period March - April, fruiting period June - July.

Found in north-western Yunnan (Zhongdian, Lijiang, Ninglang) as far east as eastern Sichuan, as far west as south-eastern Tibet; grows in limestone rocks and gullies and chalk gullies or mixed woodland, altitude 2400 - 4000 m. The type specimen of *B. microphylla* var. *prostrata* W. W. Smith was collected in the Lijiang area in Yunnan, lat. 27 deg. 40 sec. N at altitude 3700 m.; the type specimen of *B. rugulosa* var. *intermedia* Hatusima was collected at Xuemen pass, Zhongdian, Yunnan.

10b. ssp. *rupicola*

ssp. *rupicola* (W. W. Smith) Hatusima in Journ. Dept. Agr. Kyusyu Univ. 6 (6): 309, f. 17. Pl. 23(8), f. 2. 1942.—*Buxus microphylla* Sieb. et Zucc. var. *rupicola* W. W. Smith in Not. Roy. Bot. Gard. Edinb. 9: 88. 1916; Hand.-Mazz. Symb. Sin. 7: 237. 1931; Flora Yunnanensis 1: 146. 1977.

SHRUB, height 1 - 2 m.; BRANCHLETS densely covered in sparse soft hairs. LEAVES oblong, elliptical, obovate or narrowly-obovate, 1 - 1.6 cm. long, 6 - 8 mm. wide, apex rounded or retuse, base attenuate or acute, both sides initially covered in long soft hairs, gradually becoming glabrous, but at least the reverse of the leaf and the margin retaining long soft hairs, when dried both sides of the leaf are dull, the leaf surface commonly has no lateral veins, but has evident pinnate lines, or rarely is completely without marking, the petiole is densely covered in long soft hairs. MALE FLOWERS: pedicel 0.8 - 1 mm. long, sepals 2 mm. long, rudimentary pistil 0.6 - 1 mm. high; FEMALE FLOWER: ovary covered in minute sparse or slightly dense short little hairs. CAPSULE 8 mm. long, with a small quantity of short little hairs, persistent style approx. 2 mm. long. Flowering period April - May, fruiting period August - September.

Found in north-western Yunnan (Zhongdian to Eryuan), Sichuan (Muli), Tibet (Jikang and Langcun in Changdu

county) - the Tibet record is a new one -, altitude 3100 - 3400 m. The type specimen of *Buxus microphylla* var. *rupicola* W. W. Smith was collected at Gengli (near Weixi), at the watershed of the Lancang River and the Nu River.

The difference between *rupicola* and *rugulosa* and its vars., is that *rupicola* has soft hairs on both surfaces of the leaf, and small short hairs covering the ovary.

11. *Buxus stenophylla* Figure 9: 1-8

Hance in Journ. Bot. Brit. et For. 6: 331. 1868; in Journ. Linn. Soc. Bot. 13: 124. 1873 in nota; Mull.-Arg. in DC. Prodr. 16(1): 20. 1869; Rehd. et Wils. in Sarg. Pl. Wils. 2: 169. 1914; Hatusima in Journ. Dept. Agr. Kyusyu Univ. 6(6): 318. f. 22. 1942.—*Buxus sempervirens* auct. non L.: Hemsl. in Journ. Linn. Soc. 26: 418. 1894, p. p. quoad Syn.

SHRUB, height approx 1.5 m.; BRANCHES terete, BRANCHLETS quadrangular, diameter 0.7 - 1 mm, densely pubescent. LEAVES narrowly-obcordate, oblong or elliptical-oblong, 1 - 2 cm. long, 4 - 8 mm. wide, apex blunt or truncate, often retuse, base cuneate, upper leaf surface dark green, reverse light green, midrib prominent on both surfaces, lateral veins dense and obvious on the upper surface, on the reverse only slightly visible, or not clear, on the upper surface the lower half of the midrib is covered in minute fine hairs; PETIOLE approx 1 mm. long. INFLORESCENCE axillary and apicillary, capitate, approx 7 mm. long, densely pubescent, basal bracts lanceolate, with sparse long hairs on the outer side, upper bracts ovate-triangular; MALE FLOWERS: approx. 8, pedicel 0 - 0.5 mm. long, sepals ovate-elliptical, approx 2 mm. long, length of stamen together with anther 3.5 - 4 mm., rudimentary pistil 1 mm. high, enlarged at the tip; FEMALE FLOWER: sepals ovate-triangular, approx. 2.5 mm. long, entire pistil 4 mm. long, ovary same length as the style or slightly longer. style erect, apex slightly curved, stigma obcordate, decurrent nearly to the base of the style. CAPSULES ovoid, approx 6 mm. long, initially grey, with a slight covering of minute fine hairs, later becoming shiny, persistent style 2 mm. long. Flowering period February - March, fruiting period June - July.

Found in south-eastern Fujian (Anxi), Guangdong (Lian county and vicinity of Guangzhou) and Guizhou (Qingxi); grows on river banks or in forests. Type specimen collected from Anxi in Fujian.

In Hance's account of this species there was only a description of the flower; this text supplements that with a description of the fruit.

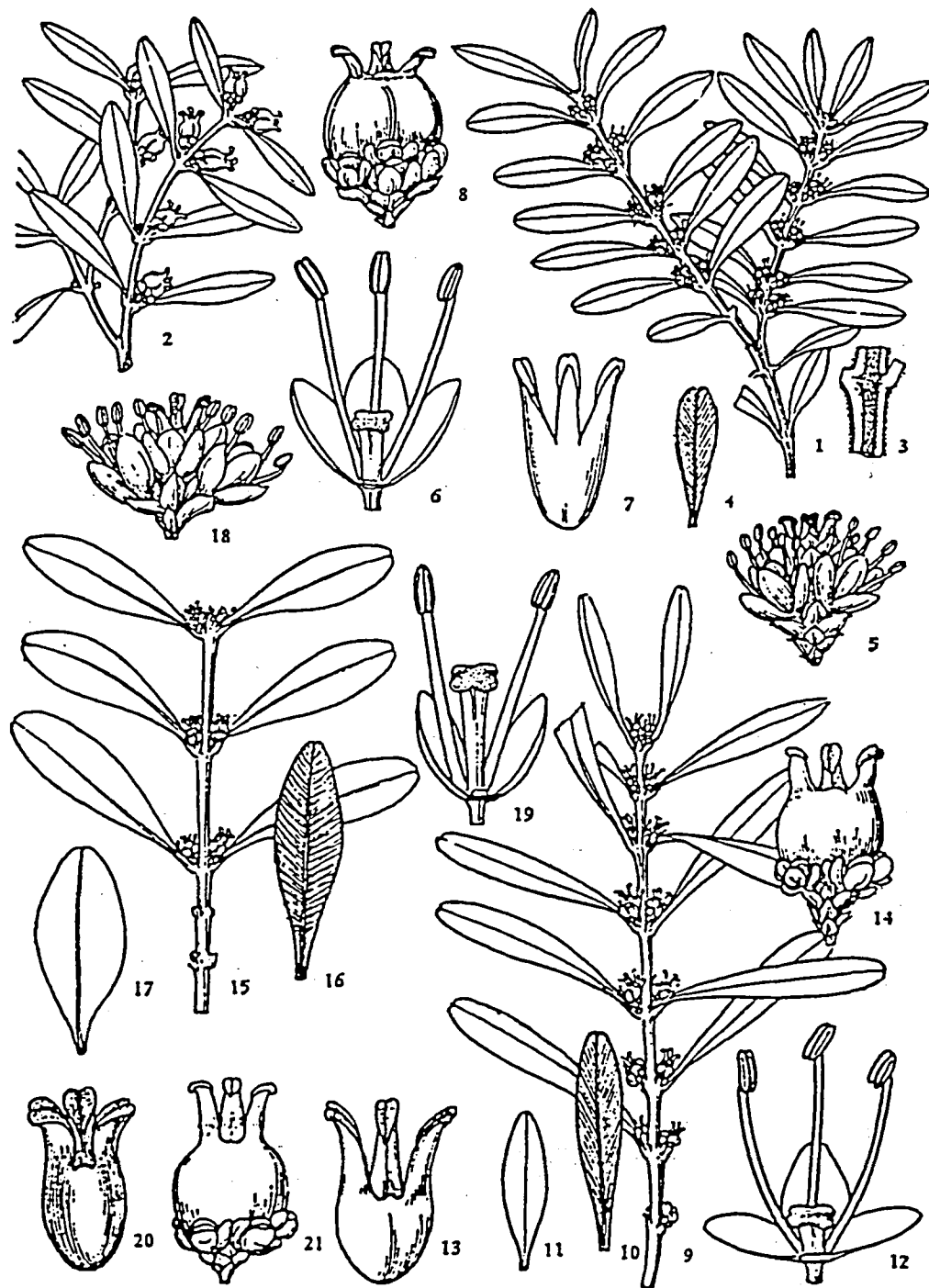


FIGURE 9

1-9, *Buxus stenophylla* Hance: 1, Flowering branch; 2, Fruiting branch; 3, One section of branchlet (showing pubescence); 4, Upper surface of leaf (showing lateral veins); 5, Inflorescence; 6, Male flower; 7, Pistil; 8, Fruit, 9-14, *Buxus harlandii* Hance: 9, Flowering branch; 10, Upper surface of leaf (showing lateral veins); 11, Alternative form of leaf; 12, Flowering branch; 13, Pistil; 14, Fruit, 15-21, *Buxus bodinieri* Levl.: 15, Flowering branch; 16, Upper surface of leaf (showing lateral veins); 17, Alternative form of leaf; 18, Inflorescence (sterile pistil covered by sepals); 19, Male flower; 20, Pistil; 21, Fruit, (Drawing: He Dongquan)

The Seasonal Gardener

Practical tips for boxwood enthusiasts from Society members



Boxwood Basics

Three species of boxwood, with some 85 cultivars, are grown for landscape in North America. In general, the same cultural practices apply to all. In the Virginia area, you probably will have to cope mainly with “American” boxwood (*Buxus sempervirens*) or its dwarf cultivar “English” boxwood (*B. sempervirens* ‘Suffruticosa’). Boxwood is properly regarded in the trade as a low-maintenance ornamental. It is slow-growing and long-lived, and bothered by only three insect pests and two problem diseases.

Low maintenance does not mean no maintenance. Periodic inspection will pay off. Watering, fertilization, sanitation, pruning, weeding, or control of insect pests may be needed on occasion to avoid stress and to insure plant vitality. For any of these actions, both do’s and don’t’s apply.

Watering: Well-established boxwoods will survive in our region of ample rainfall and fine-textured soils; but during lengthy dry spells, plants can be stressed. Therefore, thorough watering when needed is good practice—especially during the flush of new growth in the spring.

Fertilization: Do not fertilize established boxwood plantings annually. Never use heavy applications of high nitrogen materials. Plants will benefit from a light application of a balanced fertilizer every few years in March or if plants lack vitality. Do spread dolomitic limestone on occasion to avoid magnesium deficiency. Avoid fall fertilization.

Sanitation: Dense boxwoods like ‘Suffruticosa’ will collect dead leaves and other debris inside the plant. Do remove this by a strong hosing out each year; June is a good time. Such debris encourages

root growth along the stem instead of in the root ball and also may attract pathogenic fungi. This is probably the single most important maintenance task for ‘Suffruticosa’.

Pruning: Do not shear boxwood—unless your client insists. This leads to extra work and later troubles. ‘Suffruticosa’ and some other cultivars benefit from plucking 5- to 10-inch twigs from denser parts of the plant, to allow light and air into the interior. When the boxwoods eventually outgrow their location, keep in mind that pruning will be a tough job—but far cheaper than transplanting. Late November is a good time to prune.

Weeding: Do not cultivate near boxwoods; this will damage the shallow lateral roots. Do not use herbicides having ingredients that migrate through the soil and damage roots. Do use 1-2 inches of coarse bark mulch, and pull weeds.

Pest Control: Do not schedule a regular chemical spray program for boxwood. Left to themselves, boxwoods will attract enough predators to cope with insect pests. However, do get acquainted with three pests: boxwood leafminer, psyllid, and boxwood mite; be prepared to attack any serious infestation with the right spot spray at the right time. Disease problems are rare, but two root rot maladies can be serious. No chemical treatment is feasible. The solution is to avoid disease by insuring healthy plants.

William A. Gray

Owner of Brecknock Nursery, Charlottesville, Va.;
former Director of the ABS

