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Shrubs of the
M.A.C. Campus

G. E. Chadsey
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DECIDUOUS SHRUBS OF THE

M. A. C. CAMPUS.

George E. Chadsey.

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Deciduous Shrubs of the M. A. C. Campus.

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This thesis on the deciduous shrubs of the Michigan Agricultural College campus does not by any means exhaust the number found here, but the greater number of those especially adapted for landscape purposes or those having some peculiar merit for purposes of grouping or use as single specimens, I have endeavored to describe not in a strictly botanical classification but as they are seen by the casual observer or as one who recognizes them as a whole without a careful scrutiny of their parts.

Some of our most valuable species of shrubs have been found to contain so many varieties that a description of each would be impossible in a mere cursory review as this thesis attempts to be. Especially is this true of the roses and lilacs where the varieties run far up into the hundreds.

The following list then, in a general way describes the species commonly known in cultivation, such as are found in our gardens and parks and described only so far as the eye takes them in at a glance.

Amelanchier Botryapium (Dwarf June-berry) syn. *A. canadensis* often assumes a tree form fifteen to thirty feet high, very showy, flowering middle of April in short racemes of pure white flowers so dense as to almost hide the foliage and branches from view. Leaves and flowers appear at same time, the latter lasting about two weeks. In autumn the foliage takes on beautiful golden yellow tints comparable in beauty to the flowering period in spring.

Amorpha fruticosa (Indigo Shrub) a shrubby species commonly known as the false indigo on account of its indigo-blue or dark bluish purple blossoms. The leaves are elliptical oblong the lower ones petioled while the upper ones are nearly sessile. They are glabrous and slightly pubescent. The blossoms appear in June and July in terminal spikes. The shrub grows six to eight feet high, very freely branching at the root.

Aralia sieboldii (Japanese Aralia) a small species growing three to six feet high and nearly as broad. The finely cut leaves are glossy, digitate twelve inches across and are borne on stout petioles about a foot long. The small white flowers are exceedingly numerous. This is one of the truly ornamental species of our gardens.

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A. spinosa (Hercules' Club) a tall growing species twelve to sixteen feet high. Many branches arise from the root, making from the one stalk a large group. These may be removed, however, thus allowing the plant to assume a tree form. The woody part of the plant is covered with short, stout prickles. When in leaf it presents a very tropical appearance the leaves being twice or thrice pinnate and borne on petioles fifteen to twenty inches long. Immense clusters of white flowers tinted with green appear in mid-summer. The leaves and branches drop in the fall leaving only a tall bare pole till the following spring. The plant does well in most situations and soils though it has a slight preference for shady, moist places.

Berberis Thunbergii, a low Japanese shrub three to five feet high, very showy, with single reddish axillary flowers followed by brilliant red berries which persist till following spring. The leaves are small, obovate or spoon shaped, dark, glossy green in spring and summer, assuming in autumn a variety of tints of crimson, orange and bronze. The plant is valuable either for single specimens or in groups.

B. vulgaris (Common Barberry) a low, bushy shrub, single yellow flowers borne in drooping, many flowered racemes about May tenth and lasting three weeks; followed by small oblong red berries hanging on the plant till the following spring.

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The leaves are oblong fringed with closely set bristle teeth appearing in latter part of April.

B. vulgaris purpurea (Purple leaved Barberry) a shrub similiar in most respects to *B. vulgaris* except in its foliage which is a violet purple. This is a very attractive shrub, perhaps the best of the purple leaved species. It is used with good effect in the border where contrast is desired.

Calycanthus floridus (Sweet Shrub) a small compact shrub about four to six feet high, often much taller. The foliage is composed of oblong shaped leaves, deep green, somewhat coriaceous and slightly downy. The flowers are deep blue, shading to purple and from one to two inches in diameter. They appear early in spring and remain well into summer.

Caragana arborescens (Siberian Pea Tree) a shrub or small tree ten to twenty feet high. Flowers numerous, in clusters of two or three, pale yellow, appearing about May tenth and lasting about two weeks. Leaflets four to six pairs, downy, oval, appearing latter part of April and remaining throughout the season.

Cephalanthus occidentalis (Button Bush) a tall shrub common among ponds and streams in this country. The leaves are Lance oblong or ovate, pointed on petioles either in pairs or

threes. The large white flowers appear in globular heads in July.

Chionanthus Virginica (Fringe Tree) a shrub or low tree ten to eighteen feet high of rather spreading habit and light colored bark. Leaves entire, oval, three to five inches long, lower surface downy and appear about first of May. Flowers appear in latter part of May in long drooping panicles of delicate bloom with elongated, narrow, thread-like white petals. This shrub never fails to attract attention.

Clethra alnifolia (Sweet Pepper Bush) a small shrub two to four feet high. It grows best in wet places but does well in rich garden soil. It is rather slender in habit, not much branched, the bark when young light green and downy, later turning dark purple striped with grey. The leaves are inversely egg-shaped and the large, fragrant white blossoms are borne in profusion in terminal panicles and from the axils of the upper leaves and side shoots. It blooms from July till October.

Colutea arborescens (Bladder Senna) a hardy and thrifty growing shrub well adapted to dry land. It grows from five to ten feet high with a rather open well rounded head. The leaves are compound with from seven to nine elliptic leaflets which hold their glaucous green color well into autumn. The blossoms

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are yellow and continue in bloom all summer. This shrub is widely planted and proves to be a desirable plant for general planting.

Cornus florida (Flowering Dogwood) a shrub or tree fifteen to thirty feet high. Leaves appear about April twenty-third and are four to five inches long by two to three inches wide, ovate, sharp pointed, somewhat pubescent along midrib. Flowers appear in clusters of ten or twelve in a head at the ends of the branches, supported by short, club-like stalks. They are small and of little consequence for floral display. The involucre of four pure white petal-like leaves surrounding the flowers are very showy and attract considerable attention. The flowering period lasts about four weeks, followed by closely bunched scarlet berries which together with the autumnal tints of purple and crimson foliage, make this a most desirable shrub for the whole season.

C. mas (Cornelian Cherry) a shrub or low tree comparable in many respects for landscape purposes to the Flowering Dogwood. The flowers appear early in the spring in advance of the foliage, in small bright yellow clusters along the whole length of the branches. The handsome oblong fruit is a reddish color persisting well in the winter and is edible.

6.

C. sanguinea (European Red Osier) a shrub of six to eight feet in height, very conspicuous on account of red bark of branches, especially shown in winter and early spring and is used much for winter decorative effects. The flowers are greenish white, unattractive, in open, flat cymes. The fruit is a small, inconspicuous black berry; the leaves are good, making it a valuable plant for summer.

C. sericea (Silky Dogwood) a low shrub rarely rising higher than five or ten feet, rather spreading and found growing best in wet places. Leaves are large, - two or three inches long ovate or oblong, silky or downy on lower surface. The white cymose flowers are followed by pale blue globose berries. The young branches are of a purplish cast, sprinkled with white and covered with a silky down.

C. stolonifera (Wild Red Osier) a shrub three to six feet high, growing freely in wet, marshy places. Similiar in most respects to *C. sanguinea*, main stem prostrate, throwing up numerous shoots six to ten feet in length. Leaves are large and roundish, terminating in an abruptly sharp point, appearing about twentieth of April. The flowers are in small cymes, inconspicuous, and lasting from May twenty-eighth to June tenth.

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The smooth bark in summer is dull green or reddish but in autumn and winter takes on a flaming red color, making a very striking contrast to surrounding objects.

Crataegus coccinea (Scarlet Thorn) a small tree ten to twenty feet high, of good, erect habit and proportion. The leaves are heart shaped, thin, sharply cut toothed on slender petioles, appearing about April twenty-fifth and turning to various shades of red and yellow in autumn. The large, corymbed white flowers appear at the same time as the English hawthorn but last a few days longer. The bright scarlet berries following hang late in the fall and add much to the beauty of the tree during the latter season. Both thorns are very spiny.

C. Oxycantha (English Hawthorn) a small tree fifteen to twenty feet high and one of the finest specimens for landscape purposes we have. The leaves are obovate, deeply lobed and toothed, somewhat wedge shaped at the base, smooth and glossy appearing about April twenty-fifth. The fragrant white or pink single or double flowers are in beautiful sprays arranged in corymbs, appearing about May fourteenth and lasting about two weeks. The flowers are followed by small ovoid coral red fruit persisting till fall. This tree is most excellent as a single specimen being hardy and vigorous and of upright habit, also groups well with other plants.

Deutzia crenata, a medium shrub six to eight feet high, throwing up many shoots from the roots, making a well rounded, compact form. The leaves are ovate-lanceolate minutely crenate-serrate, rough from a fine pubescence on the surface and rather formal or stiff. The white and pink flowers are borne in numerous panicles and present a charming appearance.

D. gracilis is a smaller species about two feet high with ovate lanceolate serrated, bright green and smooth leaves. The flowers are rather small, snow white, very abundant, disposed along the whole length of the stem, giving the shrub the appearance of a large bouquet. This form is very desirable to fill in spaces among larger shrubs and along borders.

Diervilla sessifolia, a small shrub with lanceolate sessile leaves. The flowers are yellow and numerous, borne on peduncles. They are not showy and the shrub is not greatly planted.

Dirca palustris (Leatherwood) a small shrub growing three to five feet high but usually assuming a tree form. The flowers appear in advance of the foliage. The smooth leaves are lanceolate and of a yellowish green color. This Leatherwood is interesting on account of the peculiar, spongy bark and is cultivated largely as a curiosity.

Elaeagnus Hortensis var. *Songorica* (Russian Olive) a tall shrub or small tree cultivated for its cottony shoots and the silvery-white under surfaces of its lance ovate, mostly obtuse leaves. The flowers are small and yellow and are very fragrant, so much so that the odor is detected for a considerable distance. This shrub presents a striking effect whenever a breeze ruffles the leaves so as to show the silvery surface underneath.

E. longipes a shrub three to five feet high with numerous slender branches covered with brown scales. The leaves are thick, dark green above and silvery beneath. The flowers are small and inconspicuous but the brilliant red fruit is very showy and hangs long on the stem making a fine contrast with the autumnal foliage.

Euonymus atropurpureus (Burning Bush) a tall shrub six to fourteen feet high, somewhat spreading though often assuming a tree form. The leaves are bright green, oblong, serrate and nearly sessile, appearing about June twentieth. The dull purple flowers coming mostly in fours appear about June twenty-fifth and last nearly three weeks. The flowers are rather showy but the chief use and attraction of this shrub is on account of the brilliant scarlet berries which persist till late in autumn. Few plants possess the merit of this shrub for late autumn effects.

E. Europaeus (European Spindle Tree) a lower shrub than the *E. atropurpureus* and far inferior for planting effects. The leaves are lance-ovate or oblong, on short petioles. The three flowered peduncles have four greenish oblong petals followed by smooth four lobed red or orange-yellow fruits.

E. nanus is a dwarf shrub two to three feet high and rather spreading. The leaves are linear (one to two inches long) margin revolute and of a leathery texture. The fruit is abundant and showy.

Exochorda grandiflora (Pearl Bush) a shrub growing eight to ten feet high in the north, rather stalky and naked if allowed to grow at will. The flowers which are pearly white are the chief attraction of this shrub. They are large and numerous but not of long duration. This plant does well in the back ground of a border where lower shrubs will hide the naked portion of the stems.

Forsythia suspensa (Golden Bell) a fine growing shrub of rather spreading habit, the branches are long, slender and nearly terete and many pendent and bearing corky dot-like elevations. The leaves are simple and trifoliate, often on the same bush (if compound the lateral leaflets small) broadly ovate. The flowers are yellow bell shaped but not numerous. It is used much for training on walls and trellises and has a graceful effect.

F. viridissima (Golden Bell) a vigorous, hardy shrub with yellowish angled branches covered in early spring with showy bell shaped yellow flowers. The leaves are simple lance-oblong and of a rich deep green. It is a desirable shrub for the many places to which it adapts itself.

Halesia diptera (Snowdrop Tree) an American species about ten feet high. The leaves and blossoms appear together in the spring. The leaves are coarsely serrate, oval and rather downy. The flowers come in a profusion of white blossoms, covering the whole plant. This shrub is now being more largely planted than formerly for its general adaptability as well as its ornamental character.

Hama melis Virginica (Witch Hazel) a low tree or shrub ten to twenty feet high, bushy and forming an open, broad head in consequence of its sending up freely branching stems from a common root. The bright yellow flowers appear in axillary clusters of three or four and are quite interesting from both a botanical and horticultural point of view. Nicholson describes it thus: "During the autumn and winter they expand before the leaves of the previous summer drop off, and continue on the bush through the winter; after the petals drop off in the spring, the persistent calyces remain until the leaves reappear in April." Two celled pods containing edible nuts follow the flowers and

mature in the following season at flowering time. This shrub is not so ornamental as it is interesting.

Hydrangea paniculata grandiflora, a vigorous growing spreading shrub producing immense panicles of creamy white flowers later turning to pink. These immense pyramidal heads measuring ten to fifteen inches in length and often as many inches in diameter, appear in July and continue till the frost cuts them off. If cut back each year to prevent a too rampant growth and ragged appearance, this shrub is rarely surpassed for single specimen plants or for the edge of a lawn where it produces a marked bold effect. It should not be crowded but given all the room required for best effect.

Hypericum moserianum ('St. John's Wort) a low growing shrub two to three feet high, of a free graceful habit. The stems are much branched, leafy to the base and drooping at the ends. The flowers are from two to two and one-half inches in diameter, bright yellow and bloom continuously for the entire season. This shrub is especially effective in the border and is not without merit as a single specimen.

H. prolificum is a shrub four to six feet high with a wide spreading head. The bark is of a light reddish cast which separates into numerous thin scales. The flowers are large and showy and appear in terminal clusters from July to September.

The fruit persists till the following spring and is not unsightly although not particularly attractive.

Ilex verticillata (Black Alder) a deciduous species of the Holly, growing about six feet high. It has ovate, wedge shaped leaves, rather pointed, somewhat serrate and downy on the veins beneath. The chief excellence of this shrub is on account of its crimson scarlet berries which appear in the fall and after the leaves are gone, making this shrub very attractive for early winter effects. Its merit is for winter effects rather than for summer flower and foliage.

Kerria Japonica is an erect, free growing, hardy shrub three to six feet high. The flowers are orange yellow with five obtuse spreading petals. The foliage is bright glossy green, smooth above and slightly hairy in the under side. This shrub is an early spring bloomer and is well adapted for a wall or fence.

Ligustrum myrtifolium a species known by a variety of names. It grows about three feet high with warty branchlets. The leaves taper at both ends. The flowers are in many branched panicles. This species is half hardy but is rather graceful.

L. vulgare (Privet) a compact shrub six to ten feet high used largely for hedges and fencing. The small, shiny, dark green leaves are elliptic-lanceolate and of a waxy texture.

The white flowers (fading reddish) are in panicles and mostly terminal, and emit a heavy odor. The fruit following is a small black berry of no merit for ornamentation. This shrub does well in the open where it assumes a well rounded tree form but is used mostly for hedge purposes.

Lonicera Orientalis, a free growing shrub attaining a height of ten feet, almost glabrous. The leaves are elliptic or ovate to oblong-ovate, dark green above, pale or glaucescent beneath, two to four inches long. The pale violet or pinkish flowers are borne on short peduncles. The fruit is black.

L. Phylomelae, a shrub about sixteen feet high, almost glabrous. The leaves are roundish-ovate to oblong-ovate, ciliate, bright green often with reddish margin. The peduncles are slender, nodding and usually flowered. The fruit is rather large, pendulous and bright red. This is a very graceful species.

L. Tatarica (Tartarian Honeysuckle) a tall shrub six to eight feet high composed of thickly growing stems and branches increasing in number rapidly each season. The dull green leaves are cordate-oval and not particularly attractive. The pinkish white flowers appear in April and May in abundance and are arranged in pairs at the summit of slender axillary peduncles. The fruit following is very attractive and to their brilliant effect much of the merit of this shrub is due. The double,

berry like fruit is cherry red and persists till late in autumn.

L. Tartarica grandiflora. Similiar in most respects to *L. Tartarica*. The large flowers are pink and white.

Myrica cerifera (Wax Myrtle) a low shrub two to eight feet high with fragrant lance-oblong or lanceolate leaves becoming glossy above. The fruit is bluish and waxy and is found in the axils of the stems and along the branches. This shrub is rather unattractive but is largely used for barren, bleak situations or along the seashore.

Philadelphus aureus (Golden Leaved Philadelphus) is a showy shrub six to ten feet high well rounded and compact. The leaves are distinctly yellow and hold their color throughout the season. This shrub is one of the best foliage plants, for which it is chiefly grown. It makes a good, single specimen as well as in groups where contrast is desired.

P. coronarius (Mock Orange) is the representative of this genus. The shrubs grow erect and in a compact form to a height of twelve feet, displaying a wealth of fragrant blossoms resembling the orange flower, whence the name. The creamy white or straw colored flowers appear about May tenth. The leaves are ovate, sharply pointed and serrate.

P. Gordonianus is a very tall growing shrub and spreads to width equalling its height. It is entirely hardy and therefore a general favorite. The leaves are ovate, pointed and slightly serrate. The scentless flowers are borne in terminal racemes of from five to nine blossoms and appear about ten days later than the other sorts, affording a very pretty effect after most of the others are through flowering.

Prunus cerasifera, var. *Pissardi* (Purple Plum), a small tree or shrub much grown for its purple bark and foliage. The bark on the new shoots in spring is deep purple and the bursting leaves violet crimson. Later in the season they turn dark purple which they retain throughout the season. The flowers and fruit are of no importance and are scarcely seen.

P. Japonica alba plena (Flowering Almond), a dwarf species bearing double flowers along the whole length of the stem, making this one of the showiest of the early flowering shrubs. Its companion plant *P. Japonica rubra plena* is the same except that its blossoms are rose colored.

Pyrus Japonica (Japan Quince) a thorny, wide spreading shrub, cultivated for the large, sessile, single red and white flowers which appear in clusters on side spurs. The leaves are oval or obovate, serrate, smooth, very glossy and dark green in color. The flowers appear before the leaves, in profusion and

for an early flowering shrub it has no superior.

Rhamnus cathartica (Sea Buckthorn) a tall shrub or low tree ten to twenty feet high with a smooth stem and grey or olive tinted branches. The branches are numerous, stiff and thorny. The leaves are ovate, notched, smooth on the upper surface, marked by hairy veins beneath. The flowers are small and numerous appearing in clusters of variously colored pink and white blossoms followed by persisting black berries. The shrub is more useful as a hedge plant than for ^{an} ornamental species.

Rhus copallina (Dwarf Sumach) a low shrub one to five feet high, spreading by subterranean shoots. The leaves are compound consisting of from nineteen to twenty-one leaflets, oblong or lance-ovate, oblique, entire or serrate, thickish and shining above. The stalks and branches are downy, the flowers are white in large compact terminal panicles in early summer followed by a mass of crimson fruit. It is used to advantage to cover rocky and barren places.

R. cotinus (Smoke Tree or Venetian Sumach), a shrub five to nine feet high. The leaves are obovate or slender petioles. The mostly sterile flowers are in loose, ample panicles and present a feathery appearance. This shrub is an invaluable species for it is seen at its best when most others are looking dull.

The shrub is a very singular one and never fails to attract attention even from the most casual observer.

R. glabra laciniata (Cut-leaved Sumach) a small plant three to five feet high. The compound leaves with their finely cut leaflets resemble very much the fern. In autumn these take on brilliant crimson colors. This shrub has a decided ornamental effect.

Ribes aureum (Golden Currant) a free growing rather spreading shrub four to eight feet high, leafing out in the latter part of April. The leaves are three-lobed, toothed, ciliated at the base, shiny and of good color. The bright yellow, spicy scented flowers appear soon after the leaves and last three or four weeks. This is a very attractive shrub and is largely planted.

R. Gordonianum (Pink Currant) is a hybrid between the *R. aureum* and *R. sanguineum* and partakes of the good qualities of both species. It is the most abundant bloomer of the flowering currants and its flowers hang in racemes of crimson and yellow in early June.

Rosa rugosa a very free growing rose attaining a height of five to ten feet and almost equal in width. The foliage is abundant, dark green, plicated and dense throughout the entire

season and far into autumn. The terminal flowers are single, three to four inches in diameter, deep red with a center of yellow stamens and come in profusion in June and July. The large scarlet crimson hews following continue long into autumn, giving the shrub an appearance comparable in beauty to its flowering season. The best use that this shrub affords is in the border though it serves well in the lawn.

Rubus fruticosus, var. *laciniatus* (Cut-leaved Blackberry) a low shrub of trailing habit having the foliage deeply cut. The flower clusters are small and are pubescent. The stems have recurved prickles. This shrub is quite ornamental.

Sambucus Canadensis (Elderberry) a rank growing species attaining a height of five to ten feet. It grows best in moist places but readily adapts itself to most situations. The stems are pithy and well bunched. The compound leaves consist of five to eleven leaflets, mostly smooth and three parted. The flowers are white, gathered in flat cymes, followed by purple or black berries.

S. nigra (Black Elder) a rather larger species than *S. Canadensis*, attaining a height of twenty to twenty-five feet in some cases. It has a large, well rounded, bushy head. The flowers are small, white and in flat cymes, five or six inches

broad followed by small, berry like fruit in great abundance.

S. nigra var. *aurea* (Golden Leaved Elder) one of the best yellow foliaged plants in use for decorative purposes. The color is solid and does not fade as the season advances. It does best in a sunny position and when well cut back each year it produces a fine effect.

Spiraea Billardi a variety of *S. salicifolia*, a low shrub two to three feet high, bushy, smooth, with wedge-lanceolate leaves, simply or doubly serrate and very showy pink flowers, which keep in bloom most of the summer. This shrub is a golden leafed variety.

S. Bumalda, a very choice dwarf of vigorous habit. It grows two to three feet high and has very slender branches. The bush is well covered with foliage which lasts throughout the season. The crimson or rose pink flowers come in profusion which make it a very attractive shrub whether seen as a single specimen or in the border. It is admirably suited to bedding purposes. It blooms from mid-summer till autumn.

S. callosa, one of the best spiraeas grown. It is a low shrub with numerous slender branches and produces an abundance of pink or rosy blossoms in flat corymbs in June, which continue to appear most of the summer.

S. chamaedrifolia, a low spreading bush with smooth ovate or oblong leaves, usually blunt and cut-toothed at least toward the summit. The flowers are small and in simple corymbs.

S. opulifolia is a free growing species from six to seven feet high. The stem is rugged, the loose grey bark peeling off whence the name. The branches are recurved, the leaves three-lobed and doubly serrate and the flowers white followed by pods which turn to purple in autumn. A variety of this is *S. o. aurea* a golden leaved sort which is especially desirable as a foliage plant. The flowers are double and appear in June.

S. prunifolia (White Bridal Wreath) one of the best spiraeas grown. It grown from six to ten feet high in bushy form with numerous long, slender branches. The leaves are small, ovate, finely and sharply serrated, smooth above and minutely downy beneath. The double white flowers are produced in abundance.

S. Reevesii a very beautiful flowering sort. It is an early bloomer and the flowers are rather larger than the early flowering kinds. The blossoms are pure white and exceedingly abundant. It grows better farther south.

S. salicifolia (Common Meadow-sweet), a slender shrub two to three feet high growing best in wet places. It is rather bushy with smooth wedge lanceolate leaves, simply or doubly

serrate. The flesh colored flowers are in upright terminal panicles appearing in July and continuing throughout August.

S. sorbifolia, a very hardy shrub three to four feet high. The leaves are pinnate consisting of seventeen to twenty-one leaflets, lanceolate, taper pointed, doubly and sharply serrated. The white flowers are large, in terminal panicles appearing in July and August.

S. trilobata a usually low shrub rather spreading with rounded crenately cut three-lobed leaves. The white flowers are compact in umbel-like corymbs appearing in May.

S. Thunbergii a low bushy shrub three to five feet high with a dense, bushy head. The leaves are numerous and small which in autumn turn to shades of gold bronze and green. The flowers in threes are small and completely cover the bush and appear early. This is a very useful plant for the border and does well in many situations.

S. Van Houtii (an improved form of *S. trilobata*) a low spreading shrub four to six feet high with drooping branches. Its form is well rounded and the abundance of the bloom is remarkable. It is very easy to grow and transplant. This is one of the most valuable all around species.

Syringa Josekai (Hungarian Lilac) a vigorous growing shrub five to seven feet high, compact and of good habit. The leaves are narrow, ovate, tapering at the base, margins rugose, dark green in color on the upper surface and silvery beneath. The flowers are light to dark purple in slender open panicles. They appear about a month later than the common Lilac. The general appearance of the shrub is slender and refined.

S. Persica (Persian Lilac) is a low shrub four to six feet high, similar in habit to *S. Josekai*. The leaves are small, lanceolate, holding their bright green color for the entire summer. The flowers are purple with a bluish cast and appear in May.

S. vulgaris, (Common Lilac) an old fashioned species very common in cultivation and always a favorite. The leaves are ovate and more or less heart shaped. The large, showy lilac or pale violet flowers appear in large panicles in May. This species grown frequently from ten to twelve feet high.

Tamarix Africana, an early flowering shrub for this genus. The branches grow very long and slender and are covered in the blooming season with beautiful pink flowers affording a fine contrast to the soft, feathery foliage.

Viburnum dentatum (Arrow-wood) a shrub five to ten feet high growing commonly in wet soil. The bark is light colored and smooth. The leaves are pale and broadly ovate, evenly sharp toothed on slender petioles. The dark blue flowers are large and showy followed by purple fruit that persists long on the branches. Though it grown mainly on low ground, with enriched soil it grows well on high land.

V. nepalense is a very robust growing species. The white flowers appear much later than do the others.

V. opulus (High Bush Cranberry) is a vigorous shrub five to ten feet high, very showy in both flower and fruit. The three to five ~~ribbed~~ leaves are lobed and these pointed. In May and June the flowers appear at the ends of the branches in broad cymes of soft, delicate flowers. The red fruit following is very pretty and continues to deepen in color as winter approaches.

V. opulus sterilis (Common Snowball), a variety of the *V. opulus*. It resembles the parent quite closely but is somewhat finer in foliage and habit. The flowers appear in large globular cymes of pure white sterile blossoms.

Vitex agnus-castus (Chaste Shrub) a small neat appearing shrub three to six feet high with long narrow pointed leaves and panicles of bright lilac flowers somewhat above the foliage

This shrub is rather tender so far north but when seasons are favorable this is a very attractive shrub both from its late summer flowering season and for the aromatic fragrance which it emits.

Xanthoceras sorbifolia, a Chinese shrub growing four to eight feet high not generally known in this country. The foliage resembles the mountain ash. The large flowers are five petaled, white but copper colored at the base, disposed in racemes about eight inches long and appear in April and May with the leaves. They flower abundantly when young. This shrub is tender in the north.

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