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Taxonomic Study On Some Species Of Fabaceae Found In Min Wun Hill Near The Eastern Part Of Sagaing University Of Education

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Abstract

The selected area for this study was Min Wun Hill near the eastern part of Sagaing University of Education. This area lies between N.Lat. 21° 39' 50" and E.Long. 95° 98' 13". In the present paper 8 species belong to 7 genera were presented. The members of the family Fabaceae species Acacia catechu Willd, Acacia pennata (L.) Willd and Prosopis juliflora (Swartz) DC were under the subfamily Mimosoideae, the species Parkinsonia aculeata L. under the subfamily Caesalpiniodeae. The species Aeschynomene indica L., Clitoria ternata L., Sesbania sesban (L.) Marn and Tephrosia villosa (L.) Pers. were under the subfamily Papilionoideae. The morphological characters of the species were presented by colour photograph. The artificial key to the species were also constructed.

Key word: Taxonomy, Angiosperms, Scientific name

Introduction

Taxonomy is the study of nomenclature, description, classification, identification and relationships. Fundamental principle of taxonomy are (i) variation in plants make possible the establishment of taxonomic systems, (ii) The fundamental components in taxonomic system - classification, identification, description, nomenclature - even though conceptually distinct, are related and interrelated (Radford, 1974).

The flowering plants contribute massively to the world's primary productivity and are arguably the most important of the global biodiversity. Not only do they provide the crops that feed us, as well as ornamentals, medicines, poisons, fibers, oils, tannins, beverages, and stimulants, and herbs and spices but contribute the main structure of our terrestrial ecosystems and afford habitats for countless animals. It is not surprising, therefore, that they have held a fascination for people over the centuries and that their classification has attracted a great deal of alternation (Heywood, 2007).

Taxonomic study had among its objectives the learning of the plants on the earth and their names, of their distinctions and their affinities, their distributions and habitat characteristics, and the correlation of these facets of knowledge with pertinent scientific data contributed by research activities of related fields of botanical endeavor (Lawrence 1969). The order Fabales consists of 3 families and about 14000 species, widely distributed throughout the world. A little more than two-thirds of the species belong to the Fabaceae. The remainder are nearly equally divided between the Mimosoideae and Caesalpinioideae (Cronquist 1981).

The selected area of taxonomic study on some species of Fabaceae found in Min Wun Hill near the eastern part of Sagaing University of Education was located in Central Myanmar of dry zone has been under taken. Sagaing Township of Sagaing Region. It lie between N.Latitude 21° 39' 50" and E.Longitude 95°98' 13". The average annual temperature in Sagaing is 27.1°C, it receives an annual rainfall of less than 80.70 cm.

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The Fabaceae have an essentially worldwide distribution, being found everywhere. The trees were often found in tropical regions, while the herbaceous plants and shrubs were predominant outside of the tropics. In the study area, the collected specimens with identified and classified some species of Fabaceae included trees, herbs, shrubs, twinner and climbing shrubs.

The legumes are the third largest family of flowering plants and second only to the cereals in their economic importance. They are important for enriching nutrient - poor soils through nitrogen - fixing bacteria (Heywood, 2007).

The aim and objective of the present paper are to identify and classify the plant of some species in the family Fabaceae in Min Wun Hill near the eastern part of Sagaing University of Education; to describe the detail characteristics of the collected specimens and to complete taxonomic character of the family Fabaceae. Therefore, taxonomic study on some species of Fabaceae was still needed from various point of view and to share knowledge for advanced scientific studies.

Materials And Methods

All the specimens belong to the family Fabaceae were collected in Min Wun Hill near the eastern part of Sagaing University of Education area, from June to August 2018. The collected specimens were identification of an unknown specimen is carried out by utilizing the update floras or manuals and checklist of the particular region.

The index for nomenclatural data referred is index Kewensis by which the names and synonyms of plants up to the rank of species being confirmed. Regional floras such as Flora of Java (Backer 1965), Flora of British India (Hooker 1881-87), Flora of Ceylon (Dassanayake 1980-2001), Forest Trees (Gardner *et al.* 2000) have also been referred. All of the nomenclatural studies were finalized by referring to the web site of International Plant Name Index (Gandhi 2008). Local name are reffered to (Hundley and Chit Ko Ko 1961). The taxonomic description of 8 species and their distribution have been mentioned. An artificial key to all the studied species has also been constructed.

Results

In the present study the total of 8 species of 7 genera belonging to subfamily Mimosoideae, Caesalpinioideae and Papilionoideae were recorded. The list of the collective species were shown in Table 1.

Table 1. List of the Co	nectea	Species

Family	Subfamily	No.	Scientific name
Fabaceae	Mimosoideae	1.	Acacia catechu Willd.
		2.	Acacia pennata (L.) Willd
		3.	Prosopis juliflora (Swartz) DC.
	Caesalpinioideae	4.	Parkinsonia aculeata L.
	Papilionoideae	5.	Aeschynomene indica L
		6.	Clitoria ternatea L.
		7.	Sesbania sesban (L.) Marn.
		8.	Tephrosia villosa (L.) Pers.

1. Acacia catechu Willd., Sp. Pl. 4. 1079.

Acacia wallichiana DC., Prod.2.458.

Mimosa catechu Roxb, Fl. Ind.2.562.1830.

Myanmar name

: Sha

English name

: cutch tree

Flowering period

: Jun to November

Perennial tree, up to 8.0m high; bark dark brown, rough; branchlets smooth, glabrous, pale purplish brown. Leaves bipinnately compound, paripinnate, alternate; petioles about 4.0cm long; stipules thorny, hooked, about 4.0mm long; rachis slender, 10.0-13.0 cm long, minutely pilose; pinnae 10-20 paired, leaflets 30-40 pairs, overlapping, green, oblique at the base, entire along the margin, obtuse at the apex, glabrous on both surface: Inflorescences erect cylindrical spikes, axillary, 10.0-11.0 cm long; peduncles 1.5-1.8 cm long. Flower bisexual, actinomorphic, hypogynous, white, about 2.0-3.0 mm in diameter; bracts very small, caducous. Calyx campanulate, 5- lobed, pale green, glabrous. Corolla tubular, 5-toothed, creamy white, small, glabrous. Stamens numerous, free, exserted; filaments filiform, yellow, glabrous; anthers dithecous, dorsifixed, pale yellow, dehiscing by longitudinal slits. Carpel 1; ovary superior, oblongoid, gynophore present; unilocular with few ovules on the marginal placentae; style filform, straight, glabrous; stigma simple. Pods, strap-shaped, dark reddish - brown when mature, flat thin, glabrous. Seeds flat, broadly ovate, 3-6 seeded, greenish brown, glabrous, non-endospermic.

Specimen examined; Min Wun Hill near the eastern part of Sagaing University of Education; N.Lat. 21°39'50" and E.Long. 95°98'13"; 30.6.18; San San Wai; collected no.5.

2. Acacia pennata (L.) Willd., Sp. Pl. 4. 1090. 1806.

Acacia canescens (Grah. ex Kurz) Gamble, Fl. Madras 1: 304.1918.

Myanmar name

: Su yit

English name

: Rusty mimosa

Flowering period

: July to September

Perennial, scandent shrubs or woody climber, up to 5.0 m high; stems and branches terete, armed with straight or recurved prickles, brown-tomentose; internodes 3.0-7.0 cm long. Leaves bipinnate-compound, paripinnate, alternate; stipules subulate, small, caduceus; petioles 1.5- 5.0 cm long, aculeate, with an oval gland near the pluvinous, pubescent; racheae 10.0-21.0 cm long, glanduliferous, aculeate, pubescent; pinnae 13- to 18-paired, 2.5-6.5 cm long; leaflets 20- 60 pairs per pinna, linear-oblong, 3-5 mm by 0.5-1.0 mm, asymmetrically truncate at the base, entire and ciliate along the margin, acute at the apex, glabrous on both surfaces; petiolules about 0.5 mm long. Inflorescences consisting of pedunculate glomerules aggregated into terminal tomentose to woolly racemes or panicles; floral bracts lanceolate, 5.0 mm long, glabrous within, pubescent without. Flowers bisexual, actinomorphic, pentamerous, hypogynous, about 3.0 mm in diameter, creamy, sessile; bracteoles lanceolate, 2.0 mm long, glabrous within, pubescent without. Calyx campanulate, 5-toothed, tube 1.5 mm long, glabrous; teeth triangular-ovate, 0.5 mm long, puberulous. Corolla campanulate, 5lobed; tube 3.0 mm long, lobes oblong, about 1.0 mm long, glabrous. Stamens numerous, free, much-exserted; filaments filiform, 3.0-5.0 mm long, shortly cohering at the base; anther dithecous, dorsifixed, small. Carpel 1; ovary superior, linear, glabrous, unilocular with few ovules on the marginal placentae; style filiform, with a terminal stigma. Pods dehiscent,

strap-shaped, 5.0- 12.0 cm by 1.5-2.0 cm. Seeded, brown, 6 to 12, stalked, glabrous, non endospermic.

Specimen examined; Min Wun Hill near the eastern part of Sagaing University of Education; N.Lat. 21°39′50″ and E.Long. 95°98′13″; 16.6.18; San San Wai; collected no.2.

3. Prosopis juliflora (Swartz) DC.Sp.Pl.Prodr.2:447

Myanmar name

: Gandasein

English name : Mesquite

Flowering period : Jun to October

Perennial tree, up to 10.0m high; bark deeply wavily fissured, yellowish- brown; stems and branchlets zig-zag shaped, glabrous, spines straight, solitory or paired. Leaves bipinnately compound, alternate; stipules thorny; petioles slendar 1.0-5.0 cm long; pinnae 2-4 , slender, a circular gland near at the base of lower pinnae; leaflet 22-36 paired; petiolues small; lamina obtuse at the base, entire along the margin, mucronate at the apex. Inflorescences axillary, cylindrical spikes; penducles 4.5-5.0 cm long. Flowers bisexual, actinomorphic, hypogynous, about 4.0 mm in diameter, greenish yellow, bracteoles minute. Calyx cup-shaped, 5-toothed, pale green, glabrous. Petals 5, triangular, free, about 2.0 - 3.0 mm long, pale yellow, glabrous. Stamens 10, free, exserted; filaments filiform; anthers dithecous, dehiscing by apical pore. Carpels 1, ovary superior, unilocular with many ovules on the marginal placentae; style simple; stigma capitate. Pods flattened, with straight parallel or irregular moniliform, about 20.0-30.0 cm long, pale yellow, glabrous. Seeds ovoid, brown, 10-18 seeded, glabrous, non endospermic.

Specimen examined; Min Wun Hill near the eastern part of Sagaing University of Education; N.Lat. 21°39'50" and E.Long. 95°98'13"; 9.6.18; San San Wai; collected no.1.

4. Parkinsonia aculeata L., Sp, Pl. 375.1753.

Myanmar name

: Mya Sein

English name

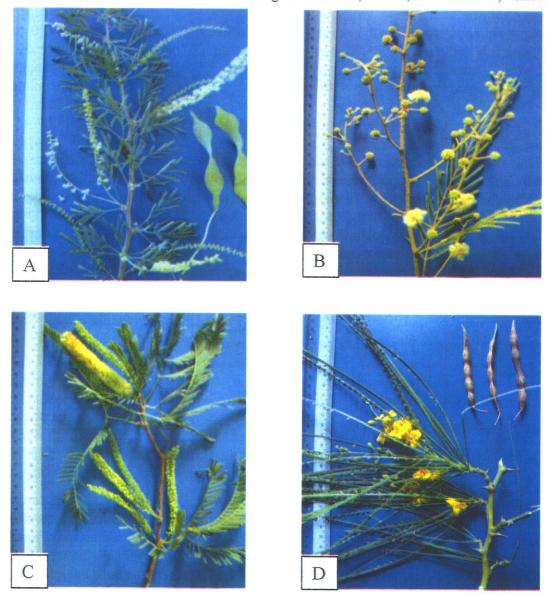
: Jerusalem thorn

Flowering period

: June to August

Perennial, erect shrubs, up to 5.0 m high; stems and branches terete, young stem greenish, finely appressed-pubescent, glabrescent and darkening with age, armed with straight, acicular spines to about long. Leaves bipinnate compound with 3-5 pinnae, when 1pinnate appearing to be simple-pinnate; stipules acicular, spinscent, 2.0-3.0 mm long, pubescent when young; primary rachis very short; secondary rachis about 16.0-30.0 cm long, flattened and narrowly marginate; leaflets about 30 to 70 paired, alternate or subopposite, oblong or obovate, 5.0-7.0 mm by 2.0-3.0 mm pubescent on both surfaces, rounded at the apex, deciduous. Inflorescences axillary, racemose, few-flowered; peduncles 6.0-10.0 cm long, pubescent. Flowers bisexual, zygomorphic, pentamerous, hypogynous, about 2.5 cm in diameter, yellow; bracts triangular, minute, caducous. Calyx campanulate 5-lobed; tube 2.0 mm long; lobes ovate-oblong, 5.0-6.0 mm long, glabrous, reflexed. Petals 5, suborbicular or broadly ovate, 9.0-11.0 mm by 6.0-7.0 mm, clawed, hairy at the base, the topmost with reddish brown dots or blotches or almost entirely reddish brown. Stamens 10, free, exsented; filaments filiform, 6.0-8.0 mm long, hairy at the base; anther dithecous, dorsifixed, ellipsoid, about 1.5 mm long, brown. Carpel 1; ovary superior, oblong, reddish green, pubescent; unilocular with many ovules in each locules, subsessile; style filiform, about 5.0 mm long, reddish, sparsely pubescent, stigma simple. Pods cylindric, 5.0-10.0 cm long, longitudinally striate, constricted between the seeds. Seeds oblong, slightly compressed, endospermic.

Specimen examined; Min Wun Hill near the eastern part of Sagaing University of Education; N.Lat. 21°39′50″ and E.Long. 95°98′13″; 7.7.18; San San Wai; collected no.6.



- A. Acacia catechu Willd.
 C. Prosopis juliflora (Swartz) DC.
- B. Acacia pennata (L.) Willd D. Parkinsonia aculeata L.
- 5. Aeschynomene indica L., Sp. Pl. 713.1753.

Aeschymene pumila L., Sp. Pl. ed. 2, 1061. 1763.

Hedysarum neli-tali Roxb., Fl. Ind. Ed. 2, 3: 365. 1832.

Myanmar name

: Nay bin

English name

: Indian jointvetch

Flowering period

: August to November

Annual, prostrate herbs, about 1.0 m high; stems terete, fistular, hollow, woody at the base, pale green, glabrous; internodes 8.0-12.0 cm long. Leaves unipinnately compound, alternate; stipules peltate-appendiculate, 0.5-1.0 cm long, green, glabrous, ciliate along the

margin; petioles short, about 4.0 mm long, sparsely hispidulous; rachis 2.0-5.0 cm long; leaflets paripinnate, 10-25 pairs, elliptic oblong, 0.7-1.2 cm by 0.1-0.2 cm, green, glabrous on both surfaces, oblique at the base, entire along the margin, short mueronate at the apex; stipels absent. Inflorescences axillary, racemose, few-flowered; peduncles slender, 0.5-1.0 cm long, green, sparsely tomentose. Flowers bisexual, zygomorphic, pentamerous, hypogynous, about 7.0 mm in diameter, pale yellow; bracts ovate, about 2.0 mm long, acute at the apex, ciliate along the margin, bracteole lanceolate-ovate, about 2.0 mm long. Calyx campanulate, 5-lobed, bilabilate, tube about 1.5 mm long; lobes lanceolate, about 2.0 mm long, glabrous, ciliate along the margin. Corolla pale yellow, inserted; standard obovate, 6.0-7.0 mm by 4.0-5.0 mm, pale yellow, red streaked within, glabrous; cuneate at the base, obtuse at the apex, wings obovate, about 5.0 mm, pale yellow, glabrous; keel outcurved, about the middle of the lower side, about 16.0 mm long, pale yellow, glabrous. Stamens 10, in 2 lateral fascicles of 5 each, itnserted; tube 2.5-3.0 mm long; filaments filiform, unequal in length, 1.5-2.0 mm long, glabrous; anthers uniform, ovoid, dorsifixed, dehiscence by longitudinal slit, yellow. Carpel 1; ovary superior, linear, green, tomentose, numerous ovules in each locule on the marginal placentae; style curved, about 1.0-5.0 mm long, glabrous; stigma simple. Pods linear, 4-10 jointed, 2.0-3.0 cm by 0.3-0.4 cm, flat, slightly curved, lower suture slightly incised, brown. Seeds reinform, brown, albuminous, non endospermic.

Specimen examined; Min Wun Hill near the eastern part of Sagaing University of Education; N.Lat. 21° 39′ 50″ and E.Long. 95° 98′ 13″; 21.7.18; San San Wai; collected no.7.

6. Clitoria ternatea L., Sp. Pl. 753.1753.

Ternatea vulgaris H.B.K., Nov.Gen. Sp.6:415.1824.

Myanmar name : Aung me nyo English name : Butterfly pea

Flowering period : June to September

Annual, trailing or twinning herbs, about 2.0 m long; stems and branches terete, green, sparsely pubescent; internodes 8.0-12.0 cm long. Leaves unipinnate-compound, imparipinnate, alternate; stipules linear to lanceolate, about 4.0 mm long, green, pubescent; petioles slender, 2.5-3.0 cm long, green, pubescent, pulvinate, shallowly canaliculated above; racheae 5.5-6.7 cm long, green, pubescent; leaflets 5-7; stipels setaceous, about 2.0 mm long, green, pubescent; leaflets lamina ovate to broadly elliptic, 3.2-5.0 cm by 2.0-3.5 cm, green, glabrous above, sparsely apressed- pubescent beneath; cuneate to rounded base; entire along the margin; obtuse to rounded at the apex. Inflorescences axillary racemes, pubescent. Flowers solitary in the leaf-axil, bisexual, zygomorphic, pentamerous, hypogynous, about 3.5 cm in diameter, violet; bracts linear to lanceolate, about 3.0 mm long, green, pubescent; pedicels terete, 0.5-0.8 cm long, green, pubescent; bracteoles orbicular, 0.8-1.2 cm by 0.7-0.9 cm, green, glabrous within, pubescent without. Calyx tubular-campanulate, 5-lobed; tube widened upward, 1.0-1.3 cm by 0.6-0.8 cm; lobes lanceolate, about 0.8 mm by 0.4 mm, green, glabrous within, pubescent without, acuminate at the apex. Corolla much-exserted, white; standard obovate, 4.0-6.0 cm by 2.0-3.0 cm, white, pubescent, with pale yellow blotch in the centre; wings obovate to oblong, 2.0-2.8 cm by about 0.1 cm, white, pale green below; glabrous; keels spatulate, 1.5-1.9 cm by 0.3-0.5 cm, violet, glabrous. Stamens 10, diadelphous, inserted; filaments filiform, 1.9-2.2 cm long, white, glabrous; anthers dithecous, dorsifixed, uniform, about 1 mm long, creamy white. Carpel 1; ovary superior, linear to oblong, densely appressed-tomentose, unilocular, with few ovules on the marginal placentae; style filiform, curved, 1.2-1.5 cm long, greenish white, ciliate along the ventral suture; stigma globose, hairy. Pods linear, flat, pale yellow, when mature finely pubescent. Seeds ovoid to oblong or reniform, compressed, black, glabrous, endospermic.

Specimen examined; Min Wun Hill near the eastern part of Sagaing University of Education; N.Lat. 21°39′50″ and E.Long. 95°98′13″; 16.6.18; San San Wai; collected no.3.

7. Sesbania sesban (L.) Marn., Philipp. J. Sci. 7: 235. 1912.

Sesbania aegyptiaca Poir., in Lam. Enc. 7:128.1806.

Myanmar name : Ya tha gyi

English name : Sesban

Flowering period : August to February

Perennial, small trees on shrubs, up to 5.0 m high; stems and branches terete, glabrescent; internodes 2.0-5.0 cm long. Leaves unipinnate-compound, paripinnate, alternate; stipules linear, about 4.0 mm long, puberulent, caducous; petioles 5.0-8.0 mm long, puberulent; racheae 3.0-12.0 cm long; leaflets linear, 6.0-25.0 mm long by 2.0-5.0 mm, glabrous on both surfaces, obtuse to oblique at the base, entire along the margin, mucronate at the apex. Inflorescences axillary, 3- to 15-flowered racemes; peduncles 1.5-3.0 cm long, puberulent. Flowers bisexual, zygomorphic, pentamerous, hypogynous, about 1.5 cm in diameter, yellow, bracts and bracteoles linear, about 3.0 mm long, pilose, caducous. Calyx campanulate, 5-lobed; tube about 5.0 mm long, glabrous; lobes broadly triangular, about 1.0 mm long, pubescent. Corolla papillionaceous, exserted; standard obovate, 1.0-1.5 cm by 1.3-1.8 cm, yellow within, (or flacked with violet-purple), clawed; wings oblong, 1.3-1.5 cm by 4.0-5.0 cm, yellow, with a minute aunicle; keel 1.0-1.5 cm by 0.5-0.7 cm, yellow or creamish, clawed. Stamens 10, diadelphous; free filaments filiform, about 1.0 cm long, glabrous; anthers uniform, dithecous basifixed, oblong, about 0.5 mm long, brown. Carpel 1; ovary superior, linear, glabrous, unilocular, with many ovules on the marginal placentae; styles filiform, glabrous; stigma capitate. Pods cylindrical, straight on slightly curved, 9.0-14.0 cm long, reddish-brown, 10-to 40-seeded, glabrous. Seeds subcylindrical, 3.0-4.0 mm by 2.0 mm, brown, usually dark-mottled, endospermic.

Specimen examined; Min Wun Hill near the eastern part of Sagaing University of Education; N.Lat. 21°39′50″ and E.Long. 95°98′13″; 7.7.18; San San Wai; collected no.4.

8. Tephrosia villosa (L.) Pers., Sp. Pl. No. 23. 329. 1807

Cracca villosa L.Sp.Pl.752.1753.

Myanmar name : Me yaing

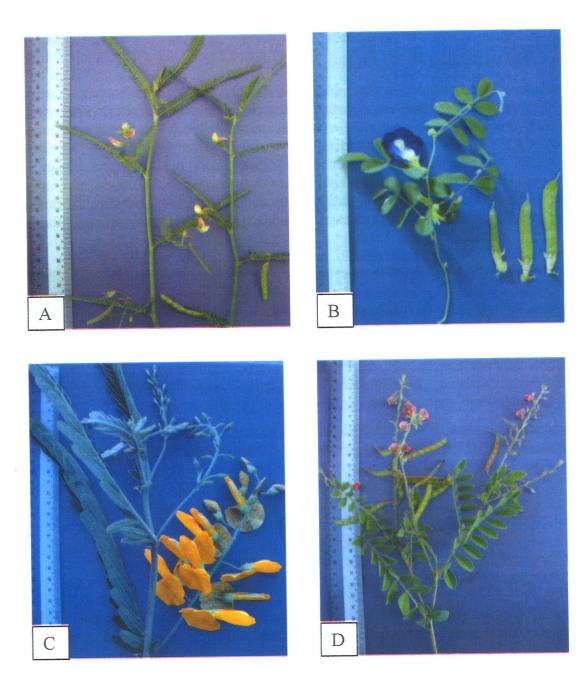
English name : Wild Indigo

Flowering period : June to November

Annual herb, sometimes suffurtescent; stems and branches terete, pubescent with white appressed hairs. Leaves unipinnately compound, imparipinnate, alternate; stipules deltoid - subulate; leaflets 9-10 pairs, opposite, elliptic, 5.0-8.0 mm by 30-50 mm, cuneate at the base, entire along the margin, acute at the apex, sparsely pubescent on both surfaces; petioles 3.0-12.0 mm long, pubescent. Inflorescences terminal or axillay raceme; few to many flowed; peduncle 10.0-12.0cm long. Flowers bisexual, zygomorpic, hypogynous, about 5.0-7.0 mm in diameter, pale pink to purple; bracts filiform, caducous, pale green, tomentose. Calyx campanulate, 5-lobed, pale green, white appressed hairs, about 3.0-7.0mm long. Corolla papilionaceous; standard obovate, pink, 3.0-5.0 mm long, glabrous; wings obovate, 3.0-5.0 mm long, pink, glabrous; keel, oblong, in curved, about 5.0-6.0 mm long, purple, glabrous, clawed, stamens 10, diadelphos; filament filiform, white, glabrous; anther dithecous, dorsifixed, pale yellow, glaborous, uniform. Carple 1; ovary superior, linear -

oblong, unilocular with 5-8 ovule on the marginal placentae; style flattened, curved, white, glabrous; stigma capitate, brown. Pods linear - oblong, compressed, densely villous, yellowish brown when ripe. Seeds 5 to 8, reniform, dark brown, glabrous, non-endospermic.

Specimen examined; Min Wun Hill near the eastern part of Sagaing University of Education; N.Lat. 21°39'50" and E.Long. 95°98'13"; 18.8.18; San San Wai; collected no.8.



A. Aeschynomene indica L
 C. Sesbania sesban (L.) Marn.

B. Clitoria ternatea L.D. Tephrosia villosa (L.) Pers.

Artificial Key To The Species Studies

1.	Trees2
1.	Shrubs or herbs 3
	2. Stamens numerous; pods 3-6 seeded 1. Acacia catechu
	2. Stamens 10; pods 10-18 seeded 3. Prosopis juliflora
3.	Plants with spine or prickles; leaves bipinnate 4
3.	Plants without spine or prickles; leaves unipinnate 5
	4. Flowers zygomorphic; yellow; pods cylindric 4. Parkinsonia culeata
	4. Flowers actinomorphic; creamy; pods strap - shaped 2. Acacia pennata
5.	Herbs; pods 5-9 seeded6
5.	Shrubs; pods 10-40 seeded 7. Sesbania sesban
	6. Calyx campanulate; leaflets 10-25 paired7
	6. Calyx tubular; leaflets 5-7 paired6. Clitoria ternata
7.	Stipules peltate - appendiculate; flowers pale yellow; pods with jointed
	5. Aeschynomene indica
7.	Stipules deltoid subulate; flowers pink to purple; pods without jointed

Discussion and Conclusion

Taxonomic study on some speices of Fabaceae in Min Wun Hill near the eastern part of Sagaing University of Education; was one of the 38 township of Sagaing Region. Altogether 8 species belong to 7 genera of 3 subfamily have been identified and describe. Among them, 3 species belong to 2 genera under the subfamily Mimosoideae, 1 species belong to 1 genera the subfamily Caesalpinioideae and 4 genera of 4 speices belong to the subfamily Papilionoideae.

The Fabaceae commonly known as the legume, pea, or bean family are large and economically important. The family was widely distributed, and is the third largest land plants. In the study area includes trees, shrubs, and perennial or annual herbaceous plants.

The members of the subfamily Mimosoideae were *Acacia catechu* Willd, *Acacia pennata* (L.) Willd and *Prosopis juliflora* (Swartz) DC. This subfamily can be easily reconized from other subfamily by its actinomorphic flowers inflorescences arranged in globose (or) cylindrical spike.

The subfamily Caesalpinioideae consists of 1 genera and 1 species, *Parkinsonia culeata* L. This subfamily was different from other subfamily by it's the flower are often zygomorphic. The subfamily Papilionoideae composed of 4 genera and 4 species, they were *Aeschynomene indica* L., *Clitoria ternata* L., *Sesbania sesban* (L.) Marn and *Tephorsia villosa* (L.) Per. The distinct of characteristic of Papilionoideae in their root nodules live in nitrogen fixing bacteria (*Rhizobia*), acting as a host, and *Rhizobia* acting as a provider of usable nitrate, froms a symbiotic relationship. This subfamily can be easily distinguished from other subfamily by its Paplionaceous corolla, monadelphous or diadelphous stamens.

As a result of this study, can know not only the morphology of the family Fabaceae but also the taxonomy of angiosperm as botany subject. Finally it is hope that this paper will provide in parts of information about some species of Fabaceae for further studying of other science students.

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