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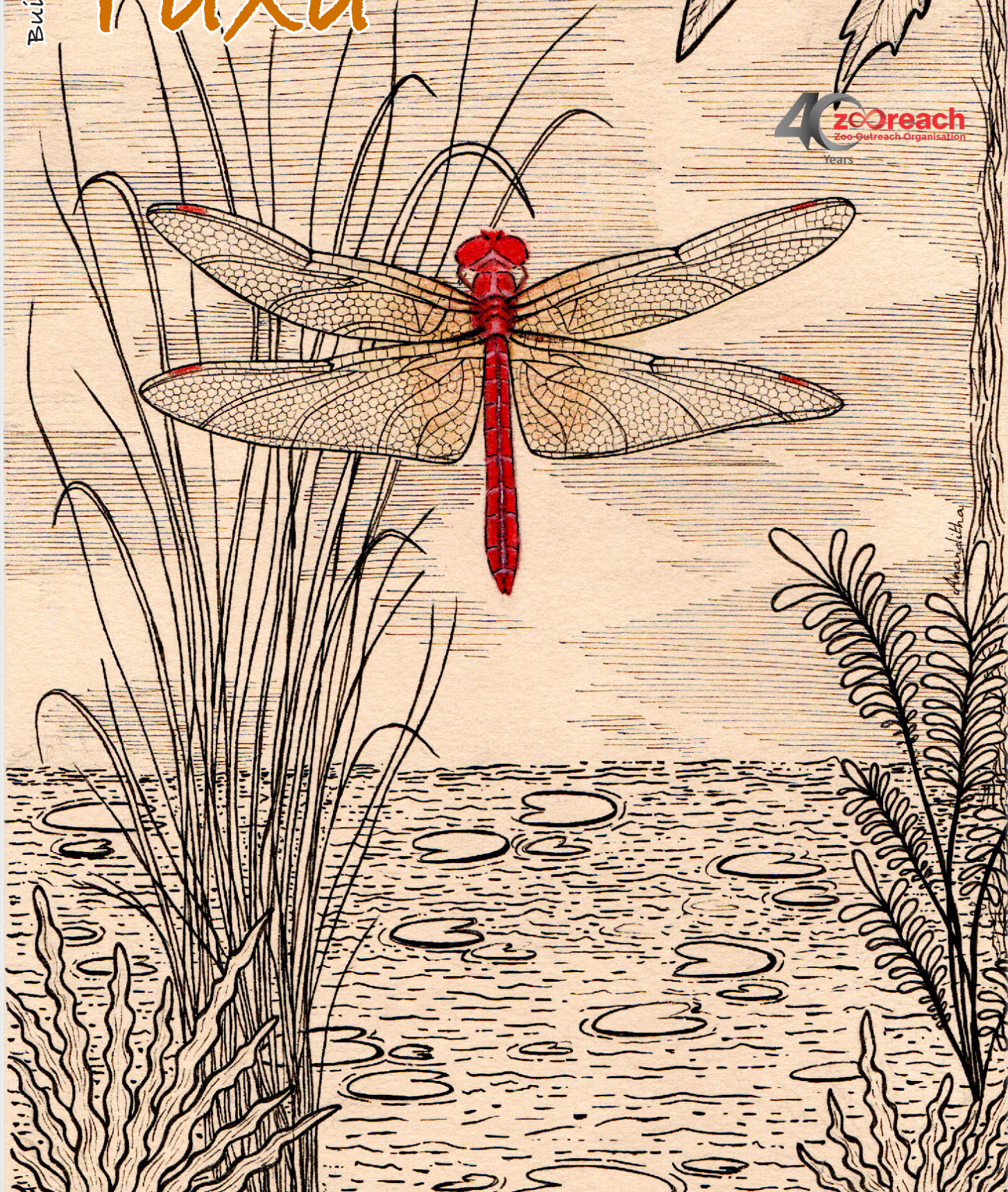
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Cover: A male Scarlet Skimmer perching on vegetation by the banks of a waterbody. Ink and watercolour illustration by Ananditha Pascal.



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Keywords: Conservation, diversity, endemic, IUCN status, new distribution record, northeastern India, occurrence, synonyms.

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INTRODUCTION

The family Rosaceae is one of the most diverse and economically significant plant groups in the order Rosales of core eudicotyledons. It is represented by around 104 genera and 5,250 accepted species (POWO 2025). The family has a worldwide distribution, with the highest abundance in the Northern Hemisphere, particularly in western North America and eastern Asia (Robertson 1974). The family is characterized by deciduous or evergreen trees, shrubs, climbers, and mostly perennial herbs (Kalkman 2004). Molecular phylogenetic studies have strongly supported the monophyly of Rosaceae and its sister relationship to a clade formed by the other eight families of the order Rosales (Zhang et al. 2011; Angiosperm Phylogeny Group 2016). However, considerable progress has been made in the evolutionary studies of Rosaceae due to the availability of DNA sequence data (Wissemann & Campbell 2007). Potter et al. (2007) analysed six nuclear and four chloroplast genes, identifying three major clades within Rosaceae, viz., Rosoideae, Dryadoideae, and Spiraeoideae. The family is ecologically diverse and economically valuable, with species used for ornamentals, timber, fruits, and medicine. Many are recognized in traditional medicine, some for their antibiotic properties (Ansari 2014), and widely used by ethnic groups to treat various ailments (Khan & Shinwari 2016).

Arunachal Pradesh, located in the northeastern part of India, is renowned for its rich floristic diversity. The state encompasses a wide range of ecosystems, from tropical and subtropical forests at lower altitudes to temperate and alpine forests in the higher elevations. It is estimated that approximately 76.93% of India's plant families are found in Arunachal Pradesh (Halder et al. 2024). Numerous floristic studies have been conducted in the state, significantly contributing to the documentation of its plant diversity (Panigrahi & Naik 1961; Rao & Joseph 1965; Panigrahi & Joseph 1966; Chauhan et al. 1996; Chowdhery et al. 1996; Ambrish 2013; Pal 2013; Bhuyan et al. 2015–16; Dash & Singh 2017; Lidén & Adhikari 2019; Bhuyan & Pangu 2020; Taram et al. 2020; Lidén & Bharali 2020). In addition to these floristic works, several taxonomic studies have also been carried out by various researchers (Gajurel et al. 2008; Srivastava & Choudhury 2008; Buragohain et al. 2014; Bhaumik 2017; Ranibala et al. 2018; Taram & Tag 2022). Many new additions have been made to the flora of the state through these studies. However, a comprehensive account of the plant families and genera, indicating the current status of plant diversity, is still lacking. As the comprehensive accounts

of most of the plant families of the states are lacking, it is difficult to estimate accurately the present status of occurrence of taxa in any group.

The Rosaceae family, one of the dominant and economically significant plant groups in the state, is particularly underexplored. Although over 100 species have been reported across various studies, a thorough examination of species diversity within each genus is still needed. Such an assessment is essential for a deeper understanding of the family's diversity, which is crucial for the conservation and management of these valuable taxa. In this context, the present study is attempted to prepare a comprehensive checklist of the family Rosaceae with respect to the state.

MATERIALS & METHODS

The comprehensive inventory was compiled by reviewing the information available in the taxonomic literature, herbarium specimens, and field surveys conducted by the authors from 2019 to 2024 in various localities of Arunachal Pradesh. Voucher specimens housed at the Arunachal Pradesh Regional Centre of the Botanical Survey of India (ARUN), Eastern Regional Centre of the Botanical Survey of India (ASSAM), Central National Herbarium of the Botanical Survey of India (CAL), and the State Forest Research Institute, Itanagar (acronym: APFH), were carefully examined. The databases 'Plants of the World Online' (<http://www.plantsoftheworldonline.org/>) and 'International Plant Name Index' (<http://www.ipni.org>) was cross checked for up-to-date nomenclature of the reviewed taxa. To comprehend the conservation status of each taxon, IUCN red-list database of threatened species (<https://www.iucnredlist.org>) was consulted. The species and infraspecific taxa are arranged alphabetically along with synonyms, distribution, area of occurrence in Arunachal Pradesh (AP), taxonomic notes and IUCN status. Cultivated varieties and hybrids are not included in the present study for taxonomic ambiguity.

RESULTS

We recorded the occurrence of 164 taxa (158 species, 8 varieties, and 1 subspecies) of Rosaceae from Arunachal Pradesh (Images 1–2). The genus *Rubus* L. is represented by the maximum number of species (49 spp.), followed by *Prunus* L. (15 spp.), *Cotoneaster* Medik. and *Potentilla* L. (11 spp. each), and *Spiraea* L. (10 spp.), among others (Figure 1). Four species *Rubus ghanakantae*, *R.*

hapoliensis, *R. ramachandrae*, and *Spiraea subdioica* were found to be endemic in the state. *Rubus niveus* var. *micranthus*, *R. alpestris*, and *Potentilla fulgens* have been reported as new distributional records for the state of Arunachal Pradesh. In the IUCN Red List of Threatened Species, *Prunus ceylanica* is categorized as 'Endangered' (EN) while majority of the plant taxa were found as not evaluated (Figure 2).

Taxonomic enumeration

(based on field survey, herbarium records and literature review)

1. ***Agrimonia pilosa*** Ledeb., Index Seminum (TU, Dorpatensis) 1823 (Suppl.): 1. 1823; Pal, Fl. Arunachal Pradesh (India) 1: 277. 2013.

2. ***Agrimonia pilosa* var. *pilosa***

Occurrence: Lower Dibang Valley, Lower Subansiri, Siang, Tirap, Upper Subansiri, West Kameng

Status: Least Concern (IUCN).

3. ***Agrimonia pilosa* var. *nepalensis*** (D.Don) Nakai, Bot. Mag. (Tokyo) 47: 247. 1933. *Agrimonia nepalensis* D. Don, Prodr. Fl. Nepal.: 229. 1825; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 415. 1996.

Occurrence: West Kameng, Subansiri.

4. ***Argentina contigua*** (Sojak) Y.H.Tong & N.H.Xia in J. Trop. Subtrop. Bot. 24: 426. 2016. *Potentilla contigua* Sojak in Candollea 43: 160. 1988; Lidén & Bharali, Symbolae Botanicae Upsalienses 40: 103. 2020.

Occurrence: West Kameng.

5. ***Argentina leuconota*** (D.Don) Soják, Thaiszia 20: 94. 2010. *Potentilla leuconota* D. Don, Prodr. Fl. Nepal. 230. 1825; Dikshit & Panigrahi, The Family Rosaceae in India 4: 106. 1998; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 424. 1996; Lidén & Bharali, Symbolae Botanicae Upsalienses 40: 103. 2020.

Occurrence: West Kameng.

6. ***Argentina lineata*** (Trevir.) Soják, Thaiszia 20: 94. 2010. *Potentilla lineata* Trevir., Ind. Sem. Vratislav. 1822; Dikshit & Panigrahi, The Family Rosaceae in India 4: 93. 1998; Dash & Singh, Fl. Kurung Kumey District, Arunachal Pradesh 498. 2017; Lidén & Bharali, Symbolae Botanicae Upsalienses 40: 103. 2020; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons) 1: 465. 2020.

Occurrence: Kameng, Kurung Kumey, Shi Yomi, Tawang.

7. ***Argentina micropetala*** (D.Don) Sojak, in Thaiszia 20: 95. 2010. *Potentilla micropetala* D.Don in Prodr. Fl. Nepal.: 231. 1825; Lidén & Bharali, Symbolae Botanicae Upsalienses 40: 105. 2020.

Occurrence: West Kameng.

8. ***Argentina microphylla*** (D.Don) Soják, Thaiszia 20: 95. 2010. *Potentilla microphylla* D.Don, Prodr. Fl. Nepal. 231. 1825; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 426. 1996; Lidén & Bharali, Symbolae Botanicae Upsalienses 40: 104. 2020.

Occurrence: West Kameng, Tawang.

9. ***Argentina peduncularis*** (D.Don) Soják, Thaiszia 20: 95. 2010. *Potentilla peduncularis* D.Don, Prodr. Fl. Nepal. 230. 1825; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 427. 1996.

Occurrence: Lohit, Shi Yomi, Tawang, West Kameng.

10. ***Argentina polyphylla*** (Wall. ex Lehm.) Soják, Thaiszia 20: 95. 2010. *Potentilla polyphylla* Wall. [Cat. no. 1026. 1829, nom. nud.] ex Lehm., Nov. Stirp. Pug. 3: 13. 1831; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 427. 1996; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons) 1: 467. 2020.

Occurrence: Shi Yomi, Tawang, West Kameng.

11. ***Aruncus gombalanus*** (Hand.-Mazz.) Hand.-Mazz., Akad. Wiss. Wien, Math.-Naturwiss. Kl. 60: 152. 1923; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons) 1: 449. 2020.

12. ***Aruncus sylvester*** Kostel. ex Maxim., Trudy Imp. S.-Peterburgsk. Bot. Sada 6: 169. 1879; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons) 1: 449. 2020.

13. ***Chamaecallis perpusilloides*** (W.W.Sm.) Smedmark in Pl. Syst. Evol. 301: 180. 2014; Lidén & Bharali, Symbolae Botanicae Upsalienses 40: 101. 2020.

Occurrence: West Kameng.

14. ***Cotoneaster acuminatus*** Lindl., Trans. Linn. Soc. London 13(1): 101. 1821 as '*acuminata*'; Kumar & Panigrahi, The Family Rosaceae in India 3: 36. 1995; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 415. 1996; Bhuyan, L. R., Pangu, Y. & Tam, N, Bull. Arunachal Forest Research, 30 & 31 (1&2), 73. 2015-16; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons) 1: 450. 2020.

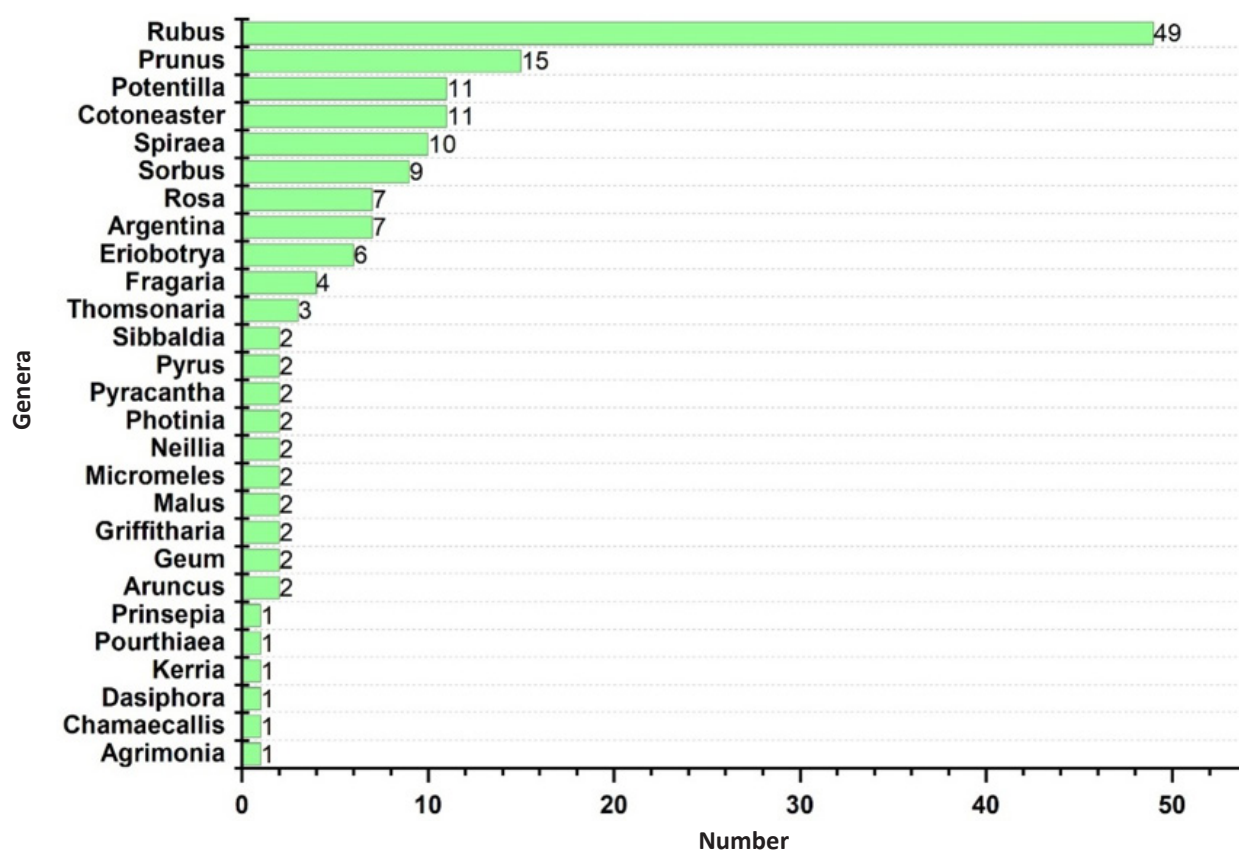


Figure 1. The genera of Rosaceae with number of species in Arunachal Pradesh.

Occurrence: Kameng, Shi Yomi.

15. *Cotoneaster affinis* Lindl., Trans. Linn. Soc. London 13 (1): 101. 1821; Kumar & Panigrahi, The Family Rosaceae in India 3: 43. 1995. *Cotoneaster bacillaris* Wall. (Cat. no. 660. 1829, nom. nud.) ex Lindl., Edwards's Bot. Reg. 15: sub t. 1229. 1829; Kumar & Panigrahi, The Family Rosaceae in India 3: 54. 1995; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 416. 1996; Pal, Fl. Arunachal Pradesh (India) 1: 278. 2013.

Occurrence: Kameng, Lohit, Lower Subansiri, Siang.

16. *Cotoneaster cordifolius* G.Klotz, Bull. Bot. Surv. India 5 (3&4): 212. 1963. *Cotoneaster cavei* G. Klotz, Bull. Bot. Surv. India 5: 213. 1964; Kumar & Panigrahi, The Family Rosaceae in India 3: 68. 1995; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 451. 2020.

17. *Cotoneaster frigidus* Wall. [Cat. no. 657. 1829, nom. nud.] ex Lindl., Edwards's Bot. Reg. 15: t. 1229. 1829 as '*frigida*'; Kumar & Panigrahi, The Family Rosaceae in India 3: 85. 1995; Chowdhery et al. in Hajra

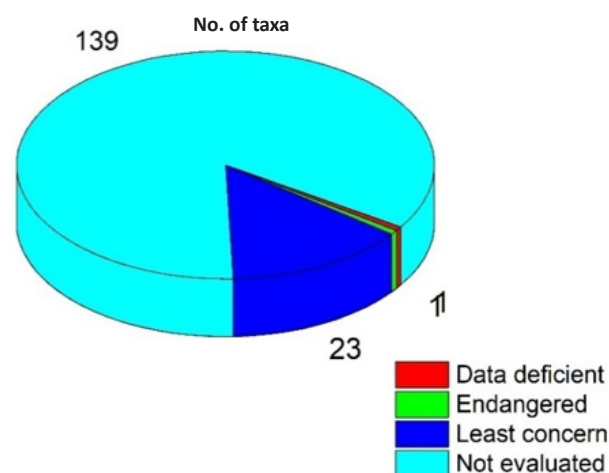


Figure 2. Taxa of Rosaceae under different IUCN Red List categories.

et al., Mat. Fl. Arunachal Pradesh 1: 416. 1996; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 451. 2020.

Occurrence: West Kameng.

18. *Cotoneaster integrifolius* (Roxb.) G.Klotz in Wiss. Z. Martin-Luther-Univ. Halle-Wittenberg, Math.-Naturwiss. Reihe 12: 779. 1963. *Cotoneaster microphyllus* var. *thymifolius* (Wall. ex Lindl.) Koehne in Deut. Dendrol.: 227. 1893; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 453. 2020.

19. *Cotoneaster microphyllus* Wall. [Cat. no. 662. 1829, nom. nud.] ex Lindl., Edwards's Bot. Reg. 13: t. 1114. 1828 as '*microphylla*'; Kumar & Panigrahi, The Family Rosaceae in India 3: 121. 1995; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 416. 1996; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 453. 2020.

Occurrence: Lohit, West Kameng.

20. *Cotoneaster nitidus* Jacques, J. Soc. Imp. Centr. Hort. 5: 516 (1859); Kumar & Panigrahi, The Family Rosaceae in India 3: 129. 1995; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 453. 2020.

21. *Cotoneaster rotundifolius* Wall. [Cat. no. 663. 1829, nom. nud.] ex Lindl., Edwards's Bot. Reg. 15: sub1229. 1829 as '*rotundifolia*'; Kumar & Panigrahi, The Family Rosaceae in India 3: 165. 1995; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 417. 1996; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 454. 2020.

Occurrence: Tawang, West Kameng.

22. *Cotoneaster sandakphuensis* G.Klotz in Bull. Bot. Surv. India 5: 213. 1963; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 454. 2020.

23. *Cotoneaster sanguineus* T.T.Yu in Bull. Brit. Mus. (Nat. Hist.) Bot. 1: 130. 1954; Kumar & Panigrahi, The Family Rosaceae in India 3: 171. 1995; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 417. 1996; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 454. 2020.

Occurrence: Tawang.

24. *Cotoneaster simonsii* Baker, Refug. Bot. 1: t. 55. 1869. *Cotoneaster assamensis* G.Klotz, Wiss. Zeitschr. Friedrich-Schiller-Univ. Jena, Math. -Naturwiss. Reihe 21(5-6): 996. 1972; Kumar & Panigrahi, The Family Rosaceae in India 3: 51. 1995; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 416. 1996; Dash

in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 451. 2020.

Occurrence: West Kameng.

25. *Dasiphora fruticosa* (L.) Rydb., Monogr. N. Amer. Potent. 2: 188. 1898 var. *fruticosa* *Potentilla fruticosa* var. *rigida* (Wall. ex Lehm.) Th. Wolf in Biblioth. Bot. 16 (71): 57. 1908; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 423. 1996. *Potentilla rigida* Wall. ex Lehm. in Nov. Stirp. Pug. 3: 3. 1831; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons) 1: 468. 2020.

Occurrence: Kameng.

26. *Eriobotrya bengalensis* (Roxb.) Kurz, Prelim. Rep. Forest Pegu, App. A: lvii. 1875; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 419. 1996.

Occurrence: Changlang, Kameng, Tawang.

Status: Least Concern (IUCN).

27. *Eriobotrya dubia* (Lindl.) Decne., Nouv. Arch. Mus. Hist. Nat. 10: 145. 1874; Hook.f., Fl. Brit. India 2: 371. 1878; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 419. 1996; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 456. 2020.

Occurrence: Kameng.

28. *Eriobotrya elliptica* Lindl., Trans. Linn. Soc. London 13: 102. 1821; Hook.f., Fl. Brit. India 2: 372. 1878; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 456. 2020.

29. *Eriobotrya longifolia* (Decne.) Hook.f., Fl. Brit. India 2: 370. 1878. Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 456. 20.

30. *Eriobotrya petiolata* Hook.f., Fl. Brit. India 2: 370. 1878; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 419. 1996; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 456. 2020.

Occurrence: Kameng.

31. *Eriobotrya salwinensis* Hand.-Mazz., Symb.Sin. 7: 475. 1933; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 456. 2020.

32. *Fragaria daltoniana* J.Gay, Ann. Sci. Nat., Bot. sér. 4, 8: 204. 1857; Chowdhery et al. in Hajra et al., Mat.

Fl. Arunachal Pradesh 1: 420. 1996; Lidén & Bharali, Symbolae Botanicae Upsalienses 40: 101. 2020; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 456. 2020.

Occurrence: Lower Dibang Valley, Shi Yomi, Tawang, West Kameng.

33. *Fragaria nilgerensis* Schltdl. ex J.Gay, Ann. Sci. Nat., Bot. sér. 4, 8: 206. 1857; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 420. 1996; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 457. 2020.

Occurrence: Shi Yomi, West Kameng.

34. *Fragaria nubicola* (Lindl. ex Hook.f.) Lacaita, J. Linn. Soc. Bot. 43: 467. 1916; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 420. 1996; Bhuyan, L. R., Pangu, Y. & Tam, N, Bull. Arunachal Forest Research, 30 & 31 (1&2), 68.2015-16; Dash & Singh, Fl. KurungKumey District, Arunachal Pradesh: 496. 2017; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 457. 2020.

Occurrence: Shi Yomi, Tawang, West Kameng.

35. *Fragaria vesca* L., Sp. Pl. 494. 1753; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 420. 1996; Ambrish, Floristic Diversity of Arunachal Pradesh (Upper Subansiri District): 173. 2013; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 457. 2020.

Occurrence: West Kameng.

36. *Geum elatum* Wall. ex G.Don in Gen. Hist. 2: 526. 1832; Lidén & Bharali, Symbolae Botanicae Upsalienses 40: 102. 2020.

Occurrence: West Kameng.

37. *Geum macrosepalum* Ludlow, Bull. Brit. Mus. (Nat. Hist.), Bot. 5: 271. 1976; Purohit & Panigrahi, The Family Rosaceae in India 1: 167. 1991; Lidén & Bharali, Symbolae Botanicae Upsalienses 40: 102. 2020; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons) 1: 457. 2020.

Occurrence: Tawang, West Kameng.

38. *Griffitharia lanata* (Wall. ex G.Don) Rushforth, Phytologia 100: 236. 2018. *Sorbus lanata* (D.Don) Schauer, Ubers. Arbeiten Vera. Schles. Ges. Vaterl. Cult. 1847: 292. 1848; Bhuyan & Pangu, Bull. Arunachal Pradesh Forest Research 35 (1&2): 35. 2020.

Occurrence: East Kameng.

39. *Griffitharia vestita* (D.Don) Rushforth, Phytologia 100: 233. 2018; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons) 1: 458. 2020. *Sorbus cuspidata* (Spach) Hedl., Kongl. Svenska Vetensk. Acad. Handl., n. f., 35(1): 89. 1901; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 443. 1996; Bhuyan, L. R., Pangu, Y. & Tam, N, Bull. Arunachal Forest Research, 30 & 31 (1&2), 77.2015-16; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 488. 2020.

Occurrence: Shi Yomi, Tawang, West Kameng.

40. *Kerria japonica* (L.) DC. in Trans. Linn. Soc. London 12: 157. 1818; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 458. 2020.

41. *Malus indica* (Wall.) B.B.Liu, Phytokeys 229: 52. 2023. *Docynia indica* (Colebr. ex Wall.) Decne., Nouv. Arch. Mus. Hist. Nat. 10: 131. 1874; Panigrahi & Naik, Bull. Bot. Surv. India 3 (3&4): 369. 1961; Chauhan et al. in Hajra, Fl. of Namdapha, Arunachal Pradesh: 159. 1996; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 417. 1996. Ambrish, Floristic Diversity of Arunachal Pradesh (Upper Subansiri District): 173. 2013; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 455. 2020.

Occurrence: Changlang, Lower Subansiri, Upper Subansiri, West Kameng.

42. *Malus sikkimensis* (Wenz.) Koehne. Gatt. Pomac.: 27. 1890; Ghora & Panigrahi, The Family Rosaceae in India 2: 384. 1995; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 421. 1996; Dash & Singh, Fl. Kurung Kumey District, Arunachal Pradesh: 496. 2017; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 459. 2020.

Occurrence: Kurung Kumey, West Kameng.

Status: Data Deficient (IUCN).

43. *Micromeles cuspidata* (Bertol.) C.K.Schneid., III. Handb. Laubholz. 1: 700. 1906. *Micromeles polycarpa* (Hook. f.) Panigrahi in Bull. Bot. Surv. India 24: 238. 1982; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 459. 2020. *Photinia cuspidata* (Bertol.) Balakr., Fl. Jowai 1: 192. 1981; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 422. 1996. *Pyrus polycarpa* Hook. f. in Fl. Brit. India 2: 378. 1878; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 433. 1996.

Occurrence: Kameng, Lohit, Lower Subansiri, Siang,

Subansiri, Tirap.

Status: Data Deficient (IUCN).

44. **Micromeles griffithii** Decne., Nouv. Arch. Mus. Hist. Nat. 10: 170. 1874. *Pyrus griffithii* (Decne.) Hook.f., in Fl. Brit. India 2: 377. 1878. *Sorbus griffithii* (Decne.) Rehder, C. S. Sargent, Pl. Wilson. 2: 277. 1915; Dash & Singh, Fl. Kurung Kumey District, Arunachal Pradesh: 508. 2017.

Occurrence: Kameng, Kurung Kumey.

45. **Neillia rubiflora** D.Don, Prodr. Fl. Nepal 229.: 1825; Purohit & Panigrahi, The Family Rosaceae in India 1: 28. 1991; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 421. 1996; Dash & Singh, Fl. Kurung Kumey District, Arunachal Pradesh: 497. 2017; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 459. 2020.

Occurrence: Kameng, Kurung Kumey, Shi Yomi.

46. **Neillia thyrsoflora** D.Don, Prodr. Fl. Nep.: 228. 1825; Panigrahi & Naik, Bull. Bot. Surv. India 3 (3&4): 370. 1961; Panigrahi & Joseph, Bull. Bot. Surv. India 8 (2): 146. 1966; Purohit & Panigrahi, The Family Rosaceae in India 1: 30. 1991; Chauhan et al. in Hajra, Fl. of Namdapha, Arunachal Pradesh: 160. 1996; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 421. 1996; Pal, Fl. Arunachal Pradesh (India) 1: 279. 2013; Ambrish, Floristic Diversity of Arunachal Pradesh (Upper Subansiri District): 174. 2013; Dash & Singh, Fl. Kurung Kumey District, Arunachal Pradesh: 497. 2017; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 459. 2020.

Occurrence: Anjaw, Changlang, Kurung Kumey, Lower Subansiri, Shi Yomi, Tawang, Tirap, Upper Subansiri.

Status: Least Concern (IUCN).

47. **Photinia griffithii** Decne., Nouv. Arch. Mus. Hist. Nat. 10: 142. 1874; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 422. 1996; *Photinia glomerata* Rehder & E. H. Wison in C. S. Sargent, Pl. Wilson 1: 190. 1912; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 460. 2020.

Occurrence: West Kameng.

48. **Photinia integrifolia** Lindl. in Trans. Linn. Soc. London 13: 103 (1822); Chauhan et al. in Hajra, Fl. of Namdapha, Arunachal Pradesh: 160. 1996. *Photinia integrifolia* var. *sublanceolata* Miq., in Fl. Ned. Ind. 1(1): 387. 1855; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 423. 1996. *Photinia wardii* C. E. C.

Fisch., Bull. Misc. Inform. Kew 1936: 28. 1936; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 423. 1996; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 461. 2020.

Occurrence: Changlang, Kurung Kumey, Lohit, Lower Subansiri, Siang, Shi Yomi, Upper Subansiri, West Kameng.

Status: Least Concern (IUCN).

49. **Potentilla bryoides** Sojak., Preslia 41: 350. 1969; Lidén & Bharali, Symbolae Botanicae Upsalienses 40: 103. 2020; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 463. 2020.

Occurrence: West Kameng.

Status: Least Concern (IUCN).

50. **Potentilla caliginosa** Sojak, Folia Geobot. Phytotax. 1: 346. 1966; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 463. 2020.

51. **Potentilla coriandrifolia** D.Don, Prodr. Fl. Nepal. 232. 1825; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 423. 1996; Dikshit & Panigrahi, The Family Rosaceae in India 4: 117. 1998; Bhuyan, L. R., Pangu, Y. & Tam, N, Bull. Arunachal Forest Research, 30 & 31 (1&2), 70. 2015-16; Dash & Singh, Fl. Kurung Kumey District, Arunachal Pradesh: 498. 2017.

Occurrence: Shi Yomi, Kameng, Kurung Kumey.

52. **Potentilla coriandrifolia** var. **dumosa** Franch. in Pl. Delavay.: 214. 1890; Lidén & Adhikari, Pleione 13(1): 182. 2019.

Occurrence: West Kameng.

53. **Potentilla fulgens** Wall. ex Sims in Bot. Mag. 53: t. 2700. 1826.

Occurrence: West Kameng.

Note: The specimen had been collected by R. S. Rao (ASSAM, collection no. 7779) from West Kameng District of Arunachal Pradesh.

54. **Potentilla griffithii** Hook.f., Fl. Brit. India 2: 351. 1878 var. **griffithii**

Potentilla griffithii var. *decurrens* Sojak in Candollea 43: 452. 1988; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 424. 1996.

55. **Potentilla indica** (Andrews) Th. Wolf, P. F. A. Ascherson & K. O. R. Graebner, Syn. Mitteleur. Fl. 6(1): 661. 1904; Dikshit & Panigrahi, The Family Rosaceae in

India 4: 133. 1998; Taram et al., in Journal of Threatened Taxa, 12 (17): 17319. 2020. *Fragaria indica* Andrews in Bot. Repos. 7: t. 479. 1807; Rao & Joseph, Bull. Bot. Surv. India, 7 (1-4): 144. 1965. *Potentilla khasiana* C. B. Clarke ex Dikshit & Panigrahi, Bull. Bot. Surv. India 21: 136. 1981; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 424. 1996; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 465. 2020.

Occurrence: Dibang Valley, East Siang, Kurung Kumey, Lohit, Lower Dibang Valley, Lower Subansiri, Papum Pare, Shi Yomi, Tirap, West Kameng, West Siang.

56. *Potentilla monanthes* Lindl. ex Lehm., in Nov. Strip. Pug. 3: 33. 1831; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons) 1: 466. 2020.

57. *Potentilla monanthes* var. *monanthes*

Occurrence: West Kameng.

58. *Potentilla monanthes* var. *sibthorpioides* Hook.f., Fl. Brit. India 2: 358. 1878; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 426 (1996); Dikshit & Panigrahi, The Family Rosaceae in India 4: 220. 1998; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 466. 2020.

Occurrence: West Kameng, Tawang.

59. *Potentilla nepalensis* Hook., Exot. Fl. 2. Pl. 88. 1824; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 427. 1996; Dikshit & Panigrahi, The Family Rosaceae in India 4: 174. 1998; Ambrish, Floristic Diversity of Arunachal Pradesh (Upper Subansiri District): 175. 2013.

Occurrence: Kameng, Siang, Upper Subansiri, Tawang, Tirap.

60. *Potentilla saundersiana* Royle, III. Bot. Himal. Mts. 1: 207. 1839; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 428. 1996; Dikshit & Panigrahi, The Family Rosaceae in India 4: 192. 1998; Bhuyan, L. R., Pangu, Y. & Tam, N, Bull. Arunachal Forest Research, 30 & 31 (1&2), 70. 2015-16; Lidén & Bharali, Symbolae Botanicae Upsalienses 40: 104. 2020; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 468. 2020.

Occurrence: Kameng, Shi Yomi, Siang, Subansiri, West Kameng, Tawang.

61. *Potentilla sundaica* (Blume) W.Theob., Burmah [Mason], ed. 3. 2: 490. 1883; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 428. 1996; Dikshit & Panigrahi, The Family Rosaceae in India 4: 223. 1998; Ambrish, Floristic Diversity of Arunachal Pradesh (Upper Subansiri District): 175. 2013; Pal, Fl. Arunachal Pradesh (India) 1: 282. 2013; Dash & Singh, Fl. Kurung Kumey District, Arunachal Pradesh: 499. 2017. *Potentilla kleiniana* Wight & Arn., in Prodr. Fl. Ind. Orient. 1: 300. 1834; Panigrahi & Naik, Bull. Bot. Surv. India 3 (3&4): 369. 1961; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 469. 2020.

Occurrence: Anjaw, Kurung, Kumey, Lower Subansiri, Tirap, Upper Siang, Upper Subansiri, West Kameng.

62. *Potentilla supina* L., Sp. Pl. 1: 497. 1753; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 469. 2020.

63. *Potentilla supina* subsp. *supina*

Status: Least Concern (IUCN).

64. *Pourthiaea arguta* (Wall. ex Lindl.) Decne, Nouv. Arch. Mus. Hist. Nat. 10: 147. 1874; Panigrahi & Naik, Bull. Bot. Surv. India 3 (3&4): 370. 1961; *Photinia hookeri* (Decne.) Merrill, Brittonia 4(1): 82. 1941; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 422. 1996.

Occurrence: Subansiri.

Status: Least Concern (IUCN).

65. *Prinsepia utilis* Royle, III. Bot. Himal. Mts. 1: 206. 1839; Ghora & Panigrahi, The Family Rosaceae in India 2: 174. 1995. Bhuyan, L. R., Pangu, Y. & Tam, N, Bull. Arunachal Forest Research, 30 & 31 (1&2), 74. 2015-16; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 470. 2020.

Occurrence: Shi Yomi.

66. *Prunus arborea* var. *montana* (Hook. f.) Kalkman, Blumea 13: 99. 1965; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 428. 1996.

Occurrence: West Kameng.

67. *Prunus campanulata* Maxim., Bull. Acad. Imp. Sci. St. Petersburg 29: 103. 1883; Ghora & Panigrahi, The Family Rosaceae in India 2: 79. 1995; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 470. 2020.

68. *Prunus cerasoides* Buch.-Ham. ex D.Don, Prodr. Fl. Nep. 239. 1825; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 429. 1996; Ambrish, Floristic Diversity of Arunachal Pradesh (Upper Subansiri District) 176. 2013; Pal, Fl. Arunachal Pradesh (India) 1: 283. 2013. *Maddenia pedicellata* Hook. f., Fl. Brit. India 2: 318. 1878.

Occurrence: Anjaw, Dibang Valley, Lower Subansiri, Lohit, Tawang, Upper Subansiri, West Kameng.

Status: Least Concern (IUCN).

69. *Prunus ceylanica* (Wight) Miq., Fl. Ned. Ind. 1(1): 366. 1855; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 429. 1996. *Pygeum glaberrimum* Hook. f., Fl. Brit. India 2: 319. 1878; Rao & Joseph, Bull. Bot. Surv. India, 7 (1-4): 144. 1965.

Occurrence: Kameng, Siang.

Status: Endangered (IUCN).

70. *Prunus cornuta* (Wallich ex Royle) Steud., Nom. Bot. ed. 2, 2: 403. 1841; Ghora & Panigrahi, The Family Rosaceae in India 2: 108. 1995; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 429. 1996; Ambrish, Floristic Diversity of Arunachal Pradesh (Upper Subansiri District): 176. 2013; Pal, Fl. Arunachal Pradesh (India) 1: 284. 2013.

Occurrence: Anjaw, Lower Subansiri, Shi Yomi, Upper Subansiri.

71. *Prunus domestica* L., Sp. Pl. 475. 1753; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 429. 1996.

Note: Cultivated taxa.

72. *Prunus gongshanensis* J.Wen, Phytokeys 11: 54. 2012.

Occurrence: West Kameng.

73. *Prunus jenkinsii* Hook.f. & Thomson, Hook.f., Fl. Brit. India 2: 317. 1878; Deb, Bull. Bot. Surv. India 3(3&4): 259. 1961; Ghora & Panigrahi, The Family Rosaceae in India 2: 137. 1995; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons) 1: 472. 2020.

74. *Prunus napaulensis* (Ser.) Steud., Nomencl. Bot. ed. 2, 2: 403. 1841 as '*nepaulensis*'; Ghora & Panigrahi, The Family Rosaceae in India 2: 118. 1995; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 430. 1996; Ambrish, Floristic Diversity of Arunachal Pradesh (Upper Subansiri District): 176. 2013; Pal, Fl. Arunachal

Pradesh (India) 1: 284. 2013; Dash & Singh, Fl. Kurung Kumey District, Arunachal Pradesh: 500. 2017; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons) 1: 472. 2020.

Occurrence: Anjaw, Changlang, Kurung Kumey, Upper Subansiri, West Kameng.

75. *Prunus persica* (L.) Batsch, Beytr. Entw. Gewachsreich: 30. 1801; Ghora & Panigrahi, The Family Rosaceae in India 2: 56. 1995; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 430. 1996; Ambrish, Floristic Diversity of Arunachal Pradesh (Upper Subansiri District): 177. 2013.

Note: Cultivated taxa.

76. *Prunus phaeosticta* (Hance) Maxim., Bull. Acad. Imp. Sci. Saint-Petersbourg, ser. 3, 29: 110. 1883; Ghora & Panigrahi, The Family Rosaceae in India 2: 143. 1995; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 430. 1996; Pal, Fl. Arunachal Pradesh (India) 1: 285. 2013.

Occurrence: Lower Subansiri.

77. *Prunus rufa* Wall. [Cat. no. 721. 1829, *nom. nud.*] ex Hook.f., Fl. Brit. India 2: 314. 1878; Ghora & Panigrahi, The Family Rosaceae in India 2: 91. 1995; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 431. 1996; Ambrish, Floristic Diversity of Arunachal Pradesh (Upper Subansiri District): 177. 2013; Pal, Fl. Arunachal Pradesh (India) 1: 285. 2013; Dash & Singh, Fl. Kurung Kumey District, Arunachal Pradesh: 500. 2017.

Occurrence: Kurung Kumey, Lower Subansiri, Shi Yomi, Upper Subansiri.

78. *Prunus salicina* Lindl., in Trans. Hort. Soc. London 7: 239. 1830; Ghora & Panigrahi, The Family Rosaceae in India 2: 43. 1995; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 431. 1996.

Occurrence: Tirap.

79. *Prunus stipulacea* Maxim., Bull. Acad. Imp. Sci. Saint-Petersbourg, ser. 3, 29: 97. 1883. *Cerasus stipulacea* (Maxim.) T.T.Yu & C.L.Li in Fl. Reipubl. Popularis Sin. 38: 68. 1986; Dash & Singh, Fl. Kurung Kumey District, Arunachal Pradesh: 500. 2017.

Occurrence: Kurung Kumey.

80. *Prunus undulata* Buch.-Ham. ex D.Don, Prodr. Fl. Nepal: 239. 1825; Ghora & Panigrahi, The Family Rosaceae in India 2: 151. 1995; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 43. 1996;

Ambrish, Floristic Diversity of Arunachal Pradesh (Upper Subansiri District): 177. 2013; Pal, Fl. Arunachal Pradesh (India) 1: 286. 2013; Dash & Singh, Fl. Kurung Kumey District, Arunachal Pradesh: 500. 2017; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 473. 2020.

Occurrence: Kurung Kumey, Lohit, Lower Subansiri, Tirap, Upper Subansiri, West Kameng.

Status: Least Concern (IUCN).

81. *Pyracantha angustifolia* (Franch.) C.K.Schneid., Ill.Handb. Laubholz. 1: 761. 1906; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 473. 2020.

Status: Least Concern (IUCN).

82. *Pyracantha crenulata* (D.Don) M.Roem., Fam. Nat. Syn. Monogr. 3: 220. 1847; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 432. 1996; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 473. 2020.

Occurrence: West Kameng.

Status: Least Concern (IUCN).

83. *Pyrus communis* L. Sp. Pl.: 479. 1753.

Note: Cultivated Taxa.

84. *Pyrus pashia* Buch.-Ham. ex D.Don, Prodr. Fl. Nepal.: 236. 1825; Panigrahi & Naik, Bull. Bot. Surv. India 3 (3&4): 370. 1961; Ghora & Panigrahi, The Family Rosaceae in India 2: 400. 1995; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 432. 1996; Ambrish, Floristic Diversity of Arunachal Pradesh (Upper Subansiri District): 178. 2013; Pal, Fl. Arunachal Pradesh (India) 1: 287. 2013.

Occurrence: Lower Subansiri, Upper Siang, Upper Subansiri, West Kameng.

Status: Least Concern (IUCN).

85. *Rosa brunonii* Lindl., Ros. Monogr.:120. 1820; Ghora & Panigrahi, The Family Rosaceae in India 2: 328. 1995; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 433. 1996; Pal, Fl. Arunachal Pradesh (India) 1: 289. 2013; Bhuyan, L. R., Pangu, Y. & Tam, N, Bull. Arunachal Forest Research, 30 & 31 (1&2), 74.2015-16; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 475. 2020.

Occurrence: Kameng, Lower Subansiri, Shi Yomi, Subansiri.

86. *Rosa indica* L., Sp. Pl. 492. 1753; Panigrahi & Naik, Bull. Bot. Surv. India 3 (3 & 4): 369. 1961; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 434. 1996; Ambrish, Floristic Diversity of Arunachal Pradesh (Upper Subansiri District): 179. 2013.

Note: Cultivated taxa

87. *Rosa leschenaultiana* (Redout. & Thory) Wight & Arn., Prodr. Fl. Ind. Orient. 1: 301. 1834; Ghora & Panigrahi, The Family Rosaceae in India 2: 337. 1995; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 434. 1996; Ambrish, Floristic Diversity of Arunachal Pradesh (Upper Subansiri District) 179. 2013.

Occurrence: Upper Subansiri.

88. *Rosa longicuspis* Bertol., in Misc. Bot. 21: 15. 1861; Hook. f., Fl. Brit. India 2: 367. 1878; Ghora & Panigrahi, The Family Rosaceae in India 2: 340. 1995.

Occurrence: Anjaw, Kurung Kumey, Lower Subansiri, Shi Yomi, West Kameng.

89. *Rosa omeiensis* Rolfe in Bot. Mag. 138: t. 8471. 1912; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 434. 1996.

Occurrence: Kameng, Tawang.

90. *Rosa sericea* Lindl., in Ros. Monogr.: 105. 1820; Ghora & Panigrahi, The Family Rosaceae in India 2: 306. 1995; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 434. 1996; Bhuyan, L. R., Pangu, Y. & Tam, N, Bull. Arunachal Forest Research, 30 & 31 (1&2), 74. 2015-16; Dash & Singh, Fl. KurungKumey District, Arunachal Pradesh: 500. 2017; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 477. 2020.

Occurrence: Kurung Kumey, Lower Dibang Valley, Shi Yomi, Tawang, West Kameng.

91. *Rosa soulieana* Crep. in Bull. Soc. Roy. Bot. Belgique 35: 21. 1896; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 478. 2020.

92. *Rubus acuminatus* Smith in Cycl. 30: no. 43. 1819; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 435. 1996; Ambrish, Floristic Diversity of Arunachal Pradesh (Upper Subansiri District) 180. 2013; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons) 1: 478. 2020.

93. ***Rubus acuminatus*** var. ***acuminatus***
Occurrence: Tawang, West Kameng.
94. ***Rubus alceifolius*** Poir., J. B. A. M. de Lamarck, Encycl. 6: 247. 1804; Chauhan et al. in Hajra, Fl. of Namdapha, Arunachal Pradesh: 161. 1996; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 435. 1996; Ambrish, Floristic Diversity of Arunachal Pradesh (Upper Subansiri District): 180. 2013; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 478. 2020.
Occurrence: Changlang, Shi Yomi.
95. ***Rubus alpestris*** Blume, Bijdr. Fl. Ned. Ind.: 1108. 1826.
Occurrence: Lower Subansiri.
Note: The specimen had been collected by G. D. Pal (ARUN, collection no. 181) from Lower Subansiri District of Arunachal Pradesh.
96. ***Rubus assamensis*** Focke in Abh. Naturwiss. Vereins Bremen 4: 197. 1874; Hook. f., Fl. Brit. India 2: 328. 1878; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 435. 1996; Pal, Fl. Arunachal Pradesh (India) 1: 292. 2013; Dash & Singh, Fl. Kurung Kumey District, Arunachal Pradesh: 502. 2017; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 479. 2020.
Occurrence: Lower Subansiri, West Kameng.
97. ***Rubus biflorus*** Buch.-Ham. ex Sm., in A. Rees, Cycl. 30: no. 9. 1819; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 435. 1996; Bhuyan, L. R., Pangu, Y. & Tam, N in Bull. Arunachal Forest Research, 30 & 31 (1&2), 74. 2015-16; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 479. 2020.
98. ***Rubus biflorus*** var. ***biflorus***
Occurrence: Shi Yomi.
99. ***Rubus biflorus*** var. ***adenophorus*** Franch., Pl. Delavay.: 207. 1890; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 479. 2020.
100. ***Rubus birmanicus*** Hook.f., Fl. Brit. India 2: 331. 1878; Panigrahi & Joseph, Bull. Bot. Surv. India 8 (2): 146. 1966; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 436. 1996; Ambrish, Floristic Diversity of Arunachal Pradesh (Upper Subansiri District) 181. 2013; Pal, Fl. Arunachal Pradesh (India) 1: 292. 2013; Dash & Singh, Fl. Kurung Kumey District, Arunachal Pradesh: 502. 2017; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 479. 2020.
Occurrence: Tirap, Upper Subansiri, Lower Subansiri, Kurung Kumey.
101. ***Rubus burkillii*** Rolfe in Bull. Misc. Inform. Kew 1920: 109. 1920; Kanjilal & al., Fl. Assam 2: 202. 1938; Panigrahi & Joseph, Bull. Bot. Surv. India 8(2): 146. 1966; Chauhan et al. in Hajra, Fl. of Namdapha, Arunachal Pradesh: 161. 1996; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 436. 1996; Dash & Singh, Fl. Kurung Kumey District, Arunachal Pradesh: 502. 2017; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 479. 2020.
Occurrence: Changlang, East Siang, Kurung Kumey.
102. ***Rubus calophyllus*** C.B. Clarke in J. Linn. Soc., Bot. 25: 19. 1889; Ambrish, Floristic Diversity of Arunachal Pradesh (Upper Subansiri District): 181. 2013; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 479. 2020.
Occurrence: Lower Dibang Valley, Shi Yomi, Upper Subansiri.
103. ***Rubus calycinoides*** Kuntze, Meth.Sp.-Beschr. Rubus: 67. 1879; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 479. 2020.
Occurrence: Lower Subansiri.
104. ***Rubus calycinus*** Wall. [Cat. no. 737. 1829, nom. nud.] ex D. Don, Prodr. Fl. Nepal. 235. 1825; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 436. 1996; Pal, Fl. Arunachal Pradesh (India) 1: 293. 2013; Dash & Singh, Fl. Kurung Kumey District, Arunachal Pradesh: 503. 2017.
Occurrence: Kameng, Kurung Kumey, Lower Subansiri.
105. ***Rubus cooperi*** D.G. Long, Notes Roy. Bot. Gard. Edinburgh 44: 259. 1987; Bhaumik in Taiwania 58(3): 199. 2013; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 479. 2020.
Occurrence: Lower Dibang Valley, Shi Yomi.
106. ***Rubus efferatus*** Craib, Fl. Siam. 1: 570. 1931. ***Rubus kurzii*** N.P. Balakr., J. Bombay Nat. Hist. Soc. 67: 58. 1970; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 439. 1996.

Occurrence: Tirap, West Kameng, Lower Dibang Valley.

107. *Rubus ellipticus* Sm., in A. Rees, Cycl. 30:no. 16. 1819; Rao & Joseph, Bull. Bot. Surv. India, 7 (1-4): 144. 1965; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 437. 1996; Ambrish, Floristic Diversity of Arunachal Pradesh (Upper Subansiri District) 181. 2013; Pal, Fl. Arunachal Pradesh (India) 1: 294. 2013; Bhuyan, L. R., Pangu, Y. & Tam, N, Bull. Arunachal Forest Research, 30 & 31 (1&2), 74. 2015-16; Dash & Singh, Fl. KurungKumey District, Arunachal Pradesh: 503. 2017; Taram et al., in Journal of Threatened Taxa, 12 (17): 17319. 2020; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 480. 2020.

108. *Rubus ellipticus* var. *ellipticus*

Occurrence: Lower Subansiri, Papum Pare, Upper Siang.

109. *Rubus ellipticus* var. *obcordatus* (Franch.) Focke, Sp. Rub.: 199 (1911).

Status: Least Concern (IUCN).

Occurrence: Anjaw, Changlang, Dibang Valley, KurungKumey, Lower Dibang Valley, Lower Subansiri, West Kameng.

110. *Rubus fairholmianus* Gardner in Calcutta J. Nat. Hist. 8: 5. 1847; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 437. 1996; Pal, Fl. Arunachal Pradesh (India) 1: 295. 2013; Dash & Singh, Fl. KurungKumey District, Arunachal Pradesh: 503. 2017.

Occurrence: Kurung Kumey, Lower Subansiri.

111. *Rubus fockeanus* Kurz in J. Asiat. Soc. Bengal, Pt. 2, Nat. Hist. 44(3): 206. 1876; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 480. 2020.

Occurrence: West Kameng.

112. *Rubus franchetianus* H.Lev., in Bull. Acad. Int. Geogr. Bot. 20: 71. 1909; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 480. 2020.

113. *Rubus franchetianus* var. *franchetianus*

Occurrence: Arunachal Pradesh.

114. *Rubus franchetianus* var. *fragarioides* (Focke) Chand. Gupta & S. S. Dash in Nelumbo 58: 45. 2016; Dash in Mao et al., Flowering Plants of India: An Annotated

Checklist (Dicotyledons)1: 480. 2020.

Occurrence: Tawang, Shi Yomi.

115. *Rubus ghanakantae* R.S.Rao & J. Joseph in Bull. Bot. Surv. India 12(1-4): 261. 1972; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 437. 1996; Pal, Fl. Arunachal Pradesh (India) 1: 296. 2013; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 481. 2020.

Occurrence: West Kameng, Lower Subansiri.

Note: Endemic to Arunachal Pradesh.

116. *Rubus hamiltonii* Hook.f., Fl. Brit. India 2: 328. 1878 as '*hamiltoni*'; Chauhan et al. in Hajra, Fl. of Namdapha, Arunachal Pradesh: 161. 1996; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 438. 1996; Pal, Fl. Arunachal Pradesh (India) 1: 297. 2013; Dash & Singh, Fl. KurungKumey District, Arunachal Pradesh 504. 2017.

Occurrence: Changlang, Lower Subansiri, Kurung Kumey, Siang, West Kameng.

117. *Rubus hapoliensis* G.D.Pal, Fl. Arunachal Pradesh (India) 1: 298. 2013; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 481. 2020.

Note: Endemic to Arunachal Pradesh.

118. *Rubus hexagynus* Roxb. ex Wall, Numer. List: 22, no. 725. 1829; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 438. 1996; Pal, Fl. Arunachal Pradesh (India) 1: 298. 2013; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 481. 2020.

Occurrence: Lower Subansiri.

119. *Rubus inopertus* (Focke) Focke, Sp. Rub.: 182. 1911; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 481. 2020.

Occurrence: Tawang.

120. *Rubus insignis* Hook.f., Fl. Brit. India 2: 329. 1878; Panigrahi & Joseph, Bull. Bot. Surv. India 8 (2): 146. 1966; Chauhan et al. in Hajra, Fl. of Namdapha, Arunachal Pradesh: 162. 1996; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 439. 1996; Ambrish, Floristic Diversity of Arunachal Pradesh (Upper Subansiri District): 182. 2013; Pal, Fl. Lower Subansiri District, Arunachal Pradesh (India) 1: 300. 2013; Dash & Singh, Fl. Kurung Kumey District, Arunachal Pradesh: 504. 2017; Bhuyan & Pangu, Bull. Arunachal Pradesh

Forest Research 35 (1&2): 37. 2020; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 482. 2020.

Occurrence: Changlang, East Kameng, KurungKumey, Lower Subansiri, Papum Pare, Tirap, Upper Subansiri, West Siang.

121. *Rubus kumaonensis* N.P.Balakr., in J. Bombay Nat. Hist. Soc. 67. 58. 1970; Grierson & Long, Fl. Bhutan 1(3): 554. 1987.

122. *Rubus lasiostylus* Focke, Hooker's Icon. Pl. 20: t. 1951. 1891; Dash & Gupta, Blumea 62: 122. 2017; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 482. 2020.

123. *Rubus lasiostylus* var. *lasiostylus*

Occurrence: West Kameng.

124. *Rubus lineatus* Reinw. ex Blume, Bijdr. Fl. Ned. Ind.: 1108. 1826; Chauhan et al. in Hajra, Fl. of Namdapha, Arunachal Pradesh: 162. 1996; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 440. 1996; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 482. 2020.

Occurrence: Anjaw, Changlang, Lohit, Lower Dibang Valley, Shi Yomi, Tirap.

125. *Rubus lucens* Focke in Abh. Naturwiss. Vereins Bremen 4: 199. 1874; Hook. f., Fl. Brit. India 2: 338. 1878; Rao & Joseph, Bull. Bot. Surv. India, 7 (1-4): 144. 1965; Panigrahi & Joseph, Bull. Bot. Surv. India 8 (2): 146. 1966; Chauhan et al. in Hajra, Fl. of Namdapha, Arunachal Pradesh: 162. 1996; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 440. 1996; Ambrish, Floristic Diversity of Arunachal Pradesh (Upper Subansiri District): 182. 2013; Pal, Fl. Lower Subansiri District, Arunachal Pradesh (India) 1: 301. 2013; Dash & Singh, Fl. Kurung Kumey District, Arunachal Pradesh: 504. 2017; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 482. 2020.

Occurrence: Lower Subansiri, Lower Dibang Valley, Papum Pare, Pakke Kessang, Shi Yomi, Tirap, Upper Siang, Upper Subansiri, West Kameng, West Siang.

126. *Rubus macilentus* Cambess., Jacquem. Voy. Inde 4: 49. 1841; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 440. 1996; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 482. 2020.

Occurrence: Dibang Valley, Shi Yomi, Upper Siang, West Kameng.

127. *Rubus mesogaeus* Focke in Bot. Jahrb. Syst. 29: 399. 1900; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 441. 1996; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 482. 2020.

Occurrence: Shi Yomi, West Kameng.

128. *Rubus moluccanus* L., Sp. Pl.: 1197. 1753; Panigrahi & Naik, Bull. Bot. Surv. India 3 (3&4): 369. 1961; Rao & Joseph, Bull. Bot. Surv. India, 7 (1-4): 144. 1965; Taram et al., in Journal of Threatened Taxa, 12 (17): 17319. 2020; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 482. 2020.

Occurrence: Anjaw, Dibang, Valley, Lower Subansiri, Upper Siang, West Kameng.

129. *Rubus niveus* Thunb., in De Rubo: 9. 1813; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 441. 1996; Ambrish, Floristic Diversity of Arunachal Pradesh (Upper Subansiri District): 183. 2013; Pal, Fl. Lower Subansiri District, Arunachal Pradesh (India) 1: 302. 2013; Dash & Singh, Fl. Kurung Kumey District, Arunachal Pradesh: 505. 2017; Taram et al., in Journal of Threatened Taxa, 12 (17): 17319. 2020; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 483. 2020.

130. *Rubus niveus* var. *micranthus* (D.Don) H.Hara, Enum. Fl. Pl. Nepal 2: 146. 1979.

Occurrence: Anjaw, West Kameng Lower Subansiri

Note: The specimen had been collected by G. V. S. Rao (ASSAM, collection no. 24713) from Lower Subansiri District of Arunachal Pradesh.

131. *Rubus niveus* var. *niveus*

Rubus lasiocarpus var. *furfuraceus* Hook.f., in Fl. Brit. India 2: 339. 1878; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 439. 1996.

Occurrence: Anjaw, East Siang, Lower Subansiri, Shi Yomi, Upper Siang, West Kameng.

132. *Rubus opulifolius* Bertol., in Misc. Bot. 22: 16. 1862; Adhikary & Gajurel in Pleione 17(3): 329. 2023.

Occurrence: Anjaw.

133. *Rubus paniculatus* Sm. in A.Rees, Cycl. 30. no. 41. 1815; Panigrahi & Naik, Bull. Bot. Surv. India 3 (3&4):

369. 1961; Chauhan et al. in Hajra, Fl. of Namdapha, Arunachal Pradesh: 163. 1996; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 442. 1996; Pal, Fl. Lower Subansiri District, Arunachal Pradesh (India) 1: 302. 2013; Dash & Singh, Fl. Kurung Kumey District, Arunachal Pradesh: 505. 2017; Taram et al., in Journal of Threatened Taxa, 12 (17): 17319. 2020; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 483. 2020.

Occurrence: Changlang, East Siang, Kurung Kumey, Lower Subansiri, Lower Dibang Valley, Shi Yomi, Tawang.

134. *Rubus pectinarioides* H.Hara in J. Jap. Bot. 47(4): 111. 1972; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons) 1: 484. 2020.

135. *Rubus pectinarius* Focke, Sp. Rub.: 21. 1910; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 442. 1996; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 484. 2020.

Occurrence: Kameng, Tawang.

136. *Rubus pedunculatus* D.Don, Prodr. Fl. Nepal. 234. 1825; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 484. 2020.

137. *Rubus pentagonus* Wall. [Cat. no. 731. 1829, nom. nud.]ex Focke, Sp. Rub.: 145. 1911; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 484. 2020.

Occurrence: Tawang.

138. *Rubus polyodontus* Hand.-Mazz., Symb. Sin. 7: 484. 1933; Bhaumik in Taiwania, 58(3): 199. 2013; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 484. 2020.

Occurrence: Shi Yomi.

139. *Rubus quinquefoliolatus* T.T.Yu & L.T.Lu in Acta Phytotax. Sin. 20: 306. 1982; Bhaumik in Taiwania, 58(3): 203. 2013; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 484. 2020.

Occurrence: Shi Yomi.

140. *Rubus ramachandrae* S.S.Dash & Chand.Gupta in Blumea 63: 26. 2018; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 484. 2020.

Occurrence: Upper Subansiri.

Note: Endemic to Arunachal Pradesh.

141. *Rubus rosifolius* Sm., Pl. Icon. Ined. 3: t. 60. 1791 as '*rosaefolius*'; Panigrahi & Naik, Bull. Bot. Surv. India 3 (3&4): 369. 1961; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 442. 1996; Ambrish, Floristic Diversity of Arunachal Pradesh (Upper Subansiri District) 184. 2013; Pal, Fl. Lower Subansiri District, Arunachal Pradesh (India) 1: 304. 2013; Dash & Singh, Fl. KurungKumey District, Arunachal Pradesh: 506. 2017; Taram et al., in Journal of Threatened Taxa, 12 (17): 17319. 2020; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons) 1: 484. 2020.

Occurrence: East Siang, KurungKumey, Lower Subansiri, Papum Pare, Shi Yomi, Upper Siang, Upper Subansiri.

142. *Rubus rugosus* Sm. in A.Rees, Cycl. 30: no. 34. 1815; Chauhan et al. in Hajra, Fl. of Namdapha, Arunachal Pradesh: 163. 1996; Dash & Singh, Fl. Kurung Kumey District, Arunachal Pradesh: 506. 2017; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 484. 2020.

Occurrence: East Siang, KurungKumey, West Kameng.

143. *Rubus sengorensis* D.G.Long & Grierson, Notes Roy. Bot. Gard. Edinburgh 40: 122. 1982; Dash & Gupta, Blumea 62: 122. 2017; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 485. 2020.

Occurrence: West Kameng.

Status: Least Concern (IUCN).

144. *Rubus sikkimensis* Hook.f. in Fl. Brit. India 2: 336. 1878. Kumar, Turczaninowia 26 (4): 16-21. 2023.

Occurrence: Tawang.

145. *Rubus splendidissimus* H.Hara, J. Jap. Bot. 40: 327. 1965; Bhuyan, L. R., Pangu, Y. & Tam, N, Bull. Arunachal Forest Research, 30 & 31 (1&2), 74. 2015-16; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 485. 2020.

Occurrence: Lower Subansiri, Shi Yomi.

146. *Rubus sumatranus* Miq., Fl. Ned. Ind., Eerste Bijv. 307. 1861; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 443. 1996; Ambrish, Floristic Diversity of Arunachal Pradesh (Upper Subansiri District) 184. 2013; Dash & Singh, Fl. Kurung Kumey District, Arunachal Pradesh: 506. 2017; Taram et al. in Journal of Threatened Taxa, 12 (17): 17319. 2020; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist

(Dicotyledons) 1: 485. 2020. *Rubus indotibetanus* Koidz., in Fl. Symb. Orient.-Asiat.: 65. 1930; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 439. 1996.

Occurrence: Anjaw, East Siang, KurungKumey, Lower Dibang Valley, Lower Subansiri, Upper Subansiri, West Kameng.

147. *Rubus thomsonii* Focke, Abh. Naturwiss. Vereins Bremen 4: 198. 1874; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 485. 2020.

Occurrence: Lower Dibang Valley, Shi Yomi.

148. *Rubus wallichianus* Wight & Arn., Prodr. Fl. Ind. Orient. 1: 298. 1834. *Rubus duthieanus* Balakr., in J. Bombay Nat. Hist. Soc. 67: 58. 1970; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 437. 1996.

Occurrence: Lower Subansiri.

149. *Rubus wardii* Merr., Brittonia 4: 84. 1941. *Rubus gigantiflorus* H. Hara, J. Jap. Bot. 40: 327. 1965; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 438. 1996; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 485. 2020.

Occurrence: Kameng, Lower Subansiri, Shi Yomi.

150. *Rubus yunnanicus* Kuntze, Meth. Sp.-Beschr. Rubus: 71. 1879; Dash & Singh, Fl. Kurung Kumey District, Arunachal Pradesh: 507. 2017; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 485. 2020.

Occurrence: Kurung Kumey.

151. *Sibbaldia cuneata* Edgew. in Trans. Linn. Soc. London 20: 44. 1846; Lidén & Bharali, Symbolae Botanicae Upsalienses 40: 105. 2020; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 486. 2020. *Sibbaldia parviflora* var. *micrantha* (Hook. f.) Dikshit & Panigrahi in Proc. Indian Acad. Sci., Pl. Sci. 90: 264. 1981; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 487. 2020.

Occurrence: West Kameng.

152. *Sibbaldia cuneifolia* (Bertol.) Paule & Soják, Čas. Nár. Muz., Rada Přír. 178: 16. 2009. *Potentilla cuneifolia* Bertol. in Misc. Bot. 24: 15. 1863; Dikshit & Panigrahi, The Family Rosaceae in India 4: 67. 1998; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 464. 2020.

153. *Sorbus foliolosa* (Wall.) Spach, Hist. Nat. Veg. 2: 96. 1834; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 444. 1996; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 488. 2020.

154. *Sorbus foliolosa* var. *foliolosa*

Pyrus wenzigiana (C.K.Scheid.) Bennet & Raizada in Indian J. Forest. 4: 68. 1981; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 433. 1996.

Occurrence: Anjaw.

Status: Least Concern (IUCN).

155. *Sorbus himalaica* Gabrieljan, Bot. Zhurn. (Moscow & Leningrad) 56(5): 658. 1971; Dash & Singh, Fl. Kurung Kumey District, Arunachal Pradesh: 508. 2017.

Occurrence: Kurung Kumey.

156. *Sorbus insignis* (Hook.f.) Hedl., Kongl. Svenska Vetensk. Acad. Handl., n. f., 35 (1): 32. 1901; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 444. 1996; Bhuyan, L. R., Pangu, Y. & Tam, N, Bull. Arunachal Forest Research, 30 & 31 (1&2), 77.2015-16.

Occurrence: Kameng, Shi Yomi.

Status: Least Concern (IUCN).

157. *Sorbus kurzii* (G.Watt ex Prain) C. K. Schneid., Bull. Herb. Boiss. ser. 2, 6: 315. 1906; Dash & Singh, Fl. KurungKumey District, Arunachal Pradesh: 509. 2017.

Occurrence: Kurung Kumey.

158. *Sorbus microphylla* Wenz., in Linnaea 38: 76. 1873; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 444. 1996; Dash & Singh, Fl. Kurung Kumey District, Arunachal Pradesh: 509. 2017; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 489. 2020.

Occurrence: Anjaw, Kameng, Lohit, Kurung Kumey, West Kameng.

Status: Least Concern (IUCN).

159. *Sorbus rufopilosa* C.K.Schneid., Bull. Herb. Boiss. Ser. 2, 6: 317. 1906; Dash & Singh, Fl. Kurung Kumey District, Arunachal Pradesh: 509. 2017.

Occurrence: Kurung Kumey.

Status: Least Concern (IUCN).

160. *Sorbus ursina* (Wall. ex G.Don) S.Schauer in Ubers. Arbeiten Verand. Schles. Ges. Vaterl. Cult. 1847: 292. 1848; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 489. 2020.

161. *Sorbus wallichii* (Hook.f.) T.T.Yu in Fl. Reipubl. Popularis Sin. 36: 329. 1974; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 445. 1996; Bhuyan, L. R., Pangu, Y. & Tam, N, Bull. Arunachal Forest Research, 30 & 31 (1&2), 77. 2015-16; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 489. 2020.

Occurrence: Anjaw, Kameng, Subansiri, Shi Yomi.

Status: Least Concern (IUCN).

162. *Sorbus wilsoniana* C.K.Schneid., Bull. Herb. Boissier, ser. 2, 6: 312. 1906; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons) 1: 489. 2020. *Pyrus expansa* (Koehne) Bennet in Indian J. Forest. 4: 68. 1981; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 432. 1996.

Status: Least Concern (IUCN).

163. *Spiraea arcuata* Hook.f., Fl. Brit. India 2: 325. 1878; Purohit & Panigrahi, The Family Rosaceae in India 1: 100. 1991; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 445. 1996.

Occurrence: Kameng, Tawang.

164. *Spiraea bella* Sims in Bot. Mag. 50: t. 2426. 1823; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 490. 2020.

165. *Spiraea bella* var. *bella*

Status: Least Concern (IUCN).

166. *Spiraea canescens* D.Don, Prodr. Fl. Nepal. 227. 1825; Purohit & Panigrahi, The Family Rosaceae in India 1: 64. 1991; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 447. 1996.

Occurrence: West Kameng.

Status: Least Concern (IUCN).

167. *Spiraea cantoniensis* Lour., Fl. Cochinch.: 322. 1790; Purohit & Panigrahi, The Family Rosaceae in India 1: 64. 1991; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 447. 1996.

Occurrence: Tawang.

Status: Least Concern (IUCN).

168. *Spiraea expansa* Wall. ex K.Koch, Index Seminum (B, Berlinensis) 1853(App.): 12. 1853. *Spiraea arunachalensis* Panigrahi & K. M. Purohit in Bull. Bot. Surv. India 26 (1-2): 83. 1985; Purohit & Panigrahi, The Family Rosaceae in India 1: 59. 1991; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 445.

1996; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 490. 2020.

Occurrence: Kameng.

169. *Spiraea japonica* L.f., Suppl. Pl.: 262. 1782; Bhuyan, L. R., Pangu, Y. & Tam, N, Bull. Arunachal Forest Research, 30 & 31 (1&2), 74. 2015-16.

170. *Spiraea japonica* var. *japonica*

Spiraea callosa Thunb. in J. A. Murray (ed.), Syst. Veg., ed. 14.: 471. 1784; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 445. 1996.

Occurrence: West Kameng.

171. *Spiraea micrantha* Hook.f., Fl. Brit. India 2: 325. 1878; Purohit & Panigrahi, The Family Rosaceae in India 1: 77. 1991; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 447. 1996; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 491. 2020.

Occurrence: West Kameng.

172. *Spiraea robusta* Hand. Mazz., Symb. Sin. 7: 453. 1933; Purohit & Panigrahi, The Family Rosaceae in India 1: 85. 1991; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 492. 2020.

173. *Spiraea subdioica* Purohit & Panigrahi in Bull. Bot. Surv. India 26 (1-2): 86. 1985; Purohit & Panigrahi, The Family Rosaceae in India 1: 87. 1991; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 447. 1996; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 492. 2020.

Occurrence: West Kameng.

Note: Endemic to Arunachal Pradesh.

174. *Spiraea vacciniifolia* D.Don, Prodr. Fl. Nepal. 227. 1825 as '*vacciniaefolia*'; Purohit & Panigrahi, The Family Rosaceae in India 1: 92. 1991; Chowdhery et al. in Hajra et al., Mat. Fl. Arunachal Pradesh 1: 448. 1996; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons)1: 492. 2020.

Occurrence: Kameng.

175. *Thomsonaria corymbifera* (Miq.) Rushforth, Phytologia 100: 239. 2018. *Sorbus corymbifera* (Miq.) T. H. Nguyen & Yakovlev, Bot. Zhurn. (Moscow & Leningrad) 66: 1188. 1981; Dash & Singh, Fl. KurungKumey District, Arunachal Pradesh: 508. 2017.

Occurrence: Kurung Kumey.



Image 1. A—*Argentina peduncularis* (D.Don) Soják | B—*Cotoneaster acuminatus* Lindl. | C—*Fragaria daltoniana* J.Gay | D—*Malus indica* (Wall.) B.B.Liu | E—*Neillia thyrsoflora* D.Don | F—*Potentilla sundaica* (Blume) W.Theob. | G—*Prunus cerasoides* Buch.-Ham. ex D.Don | H—*Pyrus pashia* Buch.-Ham. ex D.Don | I—*Photinia integrifolia* Lindl. | J—*Rosa omeiensis* Rolfe | K—*Sorbus foliolosa* (Wall.) Spach | L—*Spiraea micrantha* Hook.f. © Pinaki Adhikary.



Image 2. A—*Rubus lucens* Focke | B—*Rubus insignis* Hook.f. | C—*Rubus paniculatus* Sm. | D—*Rubus sumatranus* Miq. | E—*Rubus rosifolius* Sm. | F—*Rubus ellipticus* Sm. | G—*Rubus niveus* Thunb. | H—*Rubus opulifolius* Bertol. | I—*Rubus lineatus* Reinw. ex Blume, | J—*Rubus macilentus* Cambess. | K—*Rubus calycinus* Wall. ex D. Don | L—*Rubus cooperi* D.G. Long. © Pinaki Adhikary.

176. *Thomsonaria granulosa* (Bertol.) Rushforth, Phytologia 100(4): 239. 2018; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons) 1: 492. 2020.

177. *Thomsonaria thomsonii* (King ex Hook.f.) Rushforth, Phytologia 100(4): 237. 2018; Dash in Mao et al., Flowering Plants of India: An Annotated Checklist (Dicotyledons) 1: 492. 2020.

Occurrence: West Kameng

DISCUSSION

The present study revealed the occurrence of a total 158 species under 27 genera of Rosaceae from the state of Arunachal Pradesh. However, Halder et al. (2024) in their floristic revisionary work reported the occurrence of 137 species of Rosaceae in the state. In this study, 21 species have been added to the list. After critical scrutiny of the available literature, it is found that out of 158 species, *Rubus ghanakantae*, *Rubus hapoliensis*, *Rubus ramachandrae*, and *Spiraea subdioica* are found as endemic only to the state. The occurrence of the three taxa namely *Rubus niveus* var. *micranthus*, *Rubus alpestris*, and *Potentilla fulgens* have been reported as new distribution records for the state of Arunachal Pradesh through the scrutiny of the herbarium specimens as the available literature did not include these taxa. The richness of the species diversity is directly influenced by the diversified climatic conditions and availability of the preferred habitats. The temperate, subalpine, and alpine forests prevailing throughout the state with normally cold and low temperature provide the best conditions for the luxuriant growth and adaptation of the species. The genus *Rubus* was reported to be the most dominant one with more than 49 species representing almost 30% of the total species. The study of Ansari (2014) also revealed the rich species diversity of the family particularly the genus *Rubus* from Sikkim Himalaya. The rich taxonomic diversity and distribution of the Rosaceae in the state with domination of the genera like *Potentilla*, *Fragaria*, *Rubus*, *Malus*, and *Prunus* are also reported in the earlier works (Panigrahi & Joseph 1966; Chauhan et al. 1996; Chowdhery et al. 1996).

In our study, it is also found that botanical names used as accepted species name in the earlier floristic works like Flora of Arunachal Pradesh (Chowdhery et al. 1996), Flora of Namdapha (Chauhan et al. 1996), Flora of Kurung Kumey District (Dash & Singh 2017), and Flora of Lower Subansiri District (Pal 2013) are found now

as synonyms. The names such as *Potentilla leuconota*, *Potentilla lineata*, *Potentilla microphylla*, *Cotoneaster bacillaris*, *Sorbus cuspidata*, *Docynia indica*, *Photinia cuspidata*, *Potentilla khasiana*, *Rubus kurzii*, *Rubus indotibetanus*, *Rubus duthieanus*, *Rubus gigantiflorus*, *Pyrus expansa*, *Spiraea arunachalensis*, *Sorbus corymbifera* documented in Flora of Arunachal Pradesh are now confirmed as synonyms.

CONCLUSION

The Himalayan state of Arunachal Pradesh is one of the main region of the Indian species diversity of the Rosaceae. The checklist prepared through this study will be helpful to understand the species richness and biogeographic patterns of Rosaceae in the state. The data of distribution and occurrence of the species will facilitate the development of evidence-based plans and practical conservation frameworks to protect the diversity of Rosaceae species in the state. The findings of this study will also provide essential baseline information to support conservation strategies and sustainable utilization of resources. Moreover, the data accumulated through this study hold significant potential to inform future research and development initiatives. However, the complete taxonomic and ecological data to support proper identification and understanding the population status of species would be more valuable for the utilization and conservation of the species.

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