

山茶属的系统大纲*

闵天禄

(中国科学院昆明植物研究所, 昆明 650204)

Q949.758.4

摘要 本文提出了山茶属两个亚属、14组和119种的系统大纲。这个大纲支持建立亚属的分类等级，归并了张宏达（H. T. Chang, 1981~1996）系统中的两个亚属和9个组，取消了“亚组”和“系”的分类等级，界定了亚属和组的概念和范围，将已合格发表的300余种的名称订正归并为119种。

关键词 山茶属, 系统大纲 植物分类
分类号 Q949.758.4

A Systematic Synopsis of the Genus *Camellia*

MING Tien - Lu

(Kunming Institute of Botany, The Chinese Academy of Sciences, Kunming 650204)

Abstract The genus *Camellia* is only distributed in the Eastern Asia and contained a lot of important economic plants. So far about 300 species have validly been published and have never been completely revised. Since 1989 the author has been closely involved with the revision of system and species of this genus.

Linnaeus (1753) described 2 genera and 2 species (*Camellia japonica* L. and *Thea sinensis* L.). Dyer (1874) reduced 2 sections under genus *Camellia*. After a synopsis of genus *Camellia* published by Cohen Stuart (1916), the number of species was raised to 38. Mechior (1925) divided *Camellia* into 3 genera (*Piquetia*, *Stereocarpus* and *Camellia*), in which genus *Camellia* included 5 sections (*Eriandria*, *Calpandria*, *Eucamellia*, *Theopsis* and *Thea*) and about 50 species. Nakai (1940) divided *Camellia* to 4 genera (*Camellia*, *Camelliastrum*, *Thea* and *Theopsis*) and about 59 species. J. R. Sealy (1958) reduced the above mentioned genera to genus *Camellia* and presented a taxonomic system of 12 sections and 82 species for the first time. After then, Prof. H. T Chang (1981~1996) published a new system of *Camellia* including 4 subgenera, 22 sections and about 300 species.

On the basis of the above mentioned two systems, a new systematic synopsis of 2 subgenera, 14 sections and about 119 species are presented here. Sealy's 6 sections and Chang's 2 subgenera and 2 sections are recognized. The synopsis with appropriate synonym including Sealy's 1 section and Chang's 2 subgenera, 9 sections as well as about 190 species are reduced together with necessary nomenclature changes.

The present synopsis will provide a framework for discussing the taxonomic implications of recent research of *Camellias*. The full results will be presented in the Monograph of genus *Camellia*.

Key words *Camellia*, Systematic synopsis

* 国家自然科学基金资助项目
 1998-12-01 收稿, 1998-12-14 接受发表

对山茶属的分类系统一直有不同的见解。Sealy (1958) 的系统划分 12 个组，在系统排列上未能揭示各类群的演化关系和进化水平。张宏达 (1981—1996) 首次建立了亚属的分类等级，并将 *Yunnanea* Hu 并入本属，划分为 4 个亚属和 22 组，他强调“苞、萼不分化”是该属演化上的原始性状。

基于“花是变态的枝条”这一系统发育理论，我们认为，花有梗，小苞片螺旋状排列于花梗上，苞、萼花后宿存是原始性状，“苞、萼不分化”是花变无梗、小苞片和萼片密集排列的结果，且花后多少脱落，应属次生性状。根据雄蕊由多数到少数、离生至不同程度合生，心皮未完全合生至合生，花柱离生到不同程度合生，子房 5 室至 3 室或仅 1 室发育，中轴宿存或退化为主要线索，将该属划分成两个亚属（两条演化路线）和 14 组，通过订正研究，种类由 300 余种减少到 119 种。

这一系统在亚属水平上归并了张宏达 (H.T. Chang) 系统中的原始山茶亚属 Subg. *Protocamellia* H.T. Chang 和后生山茶亚属 Subg. *Metacamellia* H.T. Chang 两个亚属，对组一级作了较多的订正归并：根据花具梗，小苞片较多排列于花梗上，花柱离生等共同的基本特征，将金花茶组 Sect. *Chrysanthia* H.T. Chang 和肋果茶组 Sect. *Pleurocarpus* H.T. Chang 并入到古茶组 Sect. *Archecamellia* Sealy；恢复 J.R. Sealy 建立的 Sect. *Corallina* 概念，短蕊茶组 Sect. *Brachyandra* H.T. Chang 应归入其中；Sect. *Longipedicellata* H.T. Chang 其模式 *C. longipedicellata* (Hu) Chang et Fang 与 Sect. *Longissima* H.T. Chang 同质，后者应予归并；秃茶组 Sect. *Glaberrima* H.T. Chang 应并入茶组 Sect. *Thea* (L.) Dyer (见闵天禄等 1992)；Sect. *Heterogenea* Sealy 其花无梗，花柱离生，花萼半宿存等无疑是一个自然类群而应予恢复，张宏达发表的糙果茶组 Sect. *Furfuraceae* H.T. Chang 强调果皮粗糙，这一特征在其他组也可见到（如 Sect. *Camellia* 和 Sect. *Calpandria*……），Sect. *Pseudocamellia* Sealy (限于模式及张宏达移入的 *C. henryana* Cohen Stuart 和 *C. trichocarpa* H.T. Chang) 和近来发表的原始山茶组 Sect. *Protocamellia* H.T. Chang 等 3 个组均应归并入 Sect. *Heterogenea* Sealy 中；金花茶组 Sect. *Chrysanthia* H.T. Chang 中的 *C. pubipetala* Wen et Huang 和小黄花茶组 Sect. *Luteoflora* H.T. Chang，花无梗，苞、萼数较多，半宿存，花柱中、下部靠合等特征与实果茶组 Sect. *Stereocarpus* 相似而应并入其中；Sect. *Oleifera* H.T. Chang 和 Sect. *Paracamellia* Sealy 并无本质区别，也应归并。以上的订正使各类群的概念更为清楚，这一系统试图较客观地反映山茶属植物的系统发育与进化规律。

分亚属或分组检索表

1. 明显具花梗，小苞片排列于花梗上，宿存或稀早落；萼片宿存 (I. 茶亚属 Subgen. *Thea*)。
 2. 花柱离生。
 3. 叶片宽大，长达 44 cm，全缘，略反卷；通常 3~5 朵花组成具苞片的短总状花序；雄蕊极多数，花丝近于离生；子房和幼果期 5 心皮近于离生 (I) 越南茶组 Sect. *Piquetia*
 3. 叶片中等大或较小，具锯齿；花单生。
 4. 小苞片 (4~) 5 或较多；花通常较大；雌、雄蕊与花瓣近等长；雄蕊外轮花丝下半部合生；子房和幼果期先端多少浅裂 (II) 古茶组 Sect. *Archecamellia*
 4. 小苞片 0~1~2 (~3)；花小；雌、雄蕊短，长不超过花瓣的 1/2；花丝近离生，常呈钻形，压扁；子房和幼果先端全缘 (VI) 短蕊茶组 Sect. *Corallina*
 2. 花柱合生。
 5. 叶片通常较大；花较大；雄蕊 3~5 轮，外轮花丝基部或下部合生；果 3~5 室，中轴宿存。

6. 小苞片 5~6 枚，宿存；子房长圆柱状 (III) 柱蕊茶组 Sect. Cylindrica
6. 小苞片 2 (~4) 枚，早落或宿存；子房球形。
7. 花梗短而粗壮，长不超过 1 cm；小苞片早落；花和果较大；中轴粗壮 (IV) 茶组 Sect. Thea
7. 花梗纤细，长 (1.5 ~) 2 ~ 3.5 (~ 4.2) cm；小苞片早落或宿存；花和果小；中轴纤细 (V) 长梗茶组 Sect. Longipedicellata
5. 叶片较小；花小；雄蕊 2 轮，外轮花丝通常 2/3 以上合生；果小，仅 1 室发育，中轴退化。
8. 花瓣外面无毛；子房和花柱无毛 (VII) 连蕊茶组 Sect. Theopsis
8. 通常花瓣外面被粉状微柔毛；子房和花柱被毛 (VIII) 毛蕊茶组 Sect. Eriandria
1. 花无梗；小苞片紧贴于萼片之下，苞、萼半宿存或脱落 (II. 山茶亚属 Subgen. Camellia)。
9. 花柱离生。
10. 子房或果表面无瘤状突起 (IX) 离蕊茶组 Sect. Heterogenea
10. 子房和果表面具粗瘤状突起 (XI) 瘤果茶组 Sect. Tuberculata
9. 花柱多少合生。
11. 雄蕊外轮花丝下半部或基部合生，稀近离生。
12. 小苞片和萼片果期大多宿存；花柱 3~5 条靠合，具 3~5 槽 (X) 实果茶组 Sect. Stereocarpus
12. 萎片和萼片花后脱落或果期多少宿存。
13. 小苞片和萼片与花瓣同时脱落或多少宿存；花瓣基部连生；雄、雄蕊与花瓣近等长，外轮花丝 1/2 合生；花柱通常先端 3~5 浅裂 (XII) 山茶组 Sect. Camellia
13. 小苞片和萼片早落；花瓣离生或几离生；雄、雄蕊极短，长约花瓣的 1/2；花柱深裂或几达基部 (XIII) 油茶组 Sect. Paracamellia
11. 雄蕊外轮花丝全部合生成肉质管，花药着生于管口或内缘；小苞片和萼片果期多少宿存 (XIV) 管蕊茶组 Sect. Calpandria

系统排列

- I. subgen. **Thea** (L.) H.T. Chang 茶亚属 (Subgen. *Protocamellia* H.T. Chang, p.p. quoad Sect. *Archecamellia* Sealy and Sect. *Pleurocarpus* H. T. Chang; Sungen. *Metacamellia* H.T. Chang)
- (I) Sect. **Piquetia** (Pierre) Sealy 越南茶组
1. **C. piquetiana** (Pierre) Sealy
- (II) Sect. **Archecamellia** Sealy 古茶组 (Sect. *Chrysanthia* H.T. Chang, excl. *C. pubipetala* Wan et Huang; Sect. *Pleurocarpus* H.T. Chang)
2. **C. krempfii** (Gagnep.) Sealy
 3. **C. flava** (Pitard) Sealy
 4. **C. pleurocarpa** (Gagnep.) Sealy
 5. **C. aurea** H.T. Chang
 6. **C. calcicola** Ming
 7. **C. megasepala** H.T. Chang
 8. **C. tonkinensis** (Pitard) Coh. Stuart
 9. **C. chrysanthoides** H.T. Chang
 10. **C. micrantha** S.Y. Liang et Y.C. Zhong

11. *C. amplexicaulis* (Pitard) Coh. Stuart
 12. *C. impresinervis* H.T. Chang et S.Y. Liang
 13. *C. petelotii* (Merr.) Sealy
 var. *petelotii*
 var. *microcarpa* (Mo et Huang) Ming et W.J. Zhang
 14. *C. euphlebia* Merr. ex Sealy
 15. *C. fascicularis* H.T. Chang
 16. *C. huana* Ming et W.J. Zhang
 17. *C. flava* H.T. Chang
 var. *flava*
 var. *patens* (Mo et Zhong) Ming. comb. nov. (*C. longgangensis* var. *patens*
 S.L. Mo et Y.C. Zhong in Guahaia 5 (4): 354, fig. 4. 1985)
 18. *C. indochinensis* Merr.
 var. *indochinensis*
 var. *tumghinensis* (Chang) Ming et W.J. Zhang
 19. *C. pingguoensis* D. Fang
 var. *pingguoensis*
 var. *terminalis* (Liang et Su) Ming et W.J. Zhang
 (III) Sect. *Cylindrica* Ming 柱蕊茶组
 20. *C. cylindracea* Ming
 (IV) Sect. *Thea* (L.) Dyer 茶组 (Sect. *Glaberrima* H.T. Chang)
 21. *C. tachangensis* F.C. Zhang
 var. *tachangensis*
 var. *remotiserrata* (H.T. Chang et al) Ming, comb. nov. (*C. remotiserrata*
 H.T. Chang, F.L. Yu et P.S. Wang in Act. Sci. Nat. Univ. Sunyats 29 (2):
 87. 1990; *C. gymnogynoides* H.T. Chang et B.H. Chen; *C. nanchuanica*
 H.T. Chang et J.H. Xiong; *C. jinyunshanica* H.T. Chang et J.H. Xiong)
 22. *C. grandibracteata* H.T. Chang et C.X. Ye ex H.T. Chang
 23. *C. kwangsiensis* H.T. Chang
 var. *kwangsiensis*
 var. *kwangnanica* (H.T. Chang et B.H. Chen) Ming
 24. *C. taliensis* (W.W. Smith) Melchior
 25. *C. crassicolumna* H.T. Chang
 var. *crassicolumna*
 var. *multiplex* (Chang et Tang) Ming
 26. *C. sealyana* Ming (see the text)
 27. *C. gymnogyna* H.T. Chang
 28. *C. costata* H.T. Chang

29. *C. leptophylla* S. Y. Liang ex H. T. Chang
30. *C. fangchengensis* ("fangchengensis") S. Y. Liang et Y. C. Zhong
31. *C. ptilophylla* H. T. Chang
32. *C. sinensis* (L.) O. Kuntze
- var. *sinensis*
 - var. *assamica* (Masters) Kitamura
 - var. *dehungensis* (H. T. Chang et Chen) Ming
 - var. *pubilimba* H. T. Chang
- (V) Sect. *Longipedicellata* H. T. Chang 长梗茶组 (Sect. *Longissima* H. T. Chang)
33. *C. longipedicellata* (Hu) H. T. Chang et D. Fang
34. *C. hekouensis* C. J. Wang et G. S. Fan
35. *C. gracilipes* Merr. ex Sealy
36. *C. longissima* H. T. Chang et S. Y. Liang ex H. T. Chang
37. *C. laotica* (Gagnep.) Ming, comb. nov. (*Thea laotica* Gagnep. in Not. Syst. 10: 128. 1942)
- (VI) Sect. *Corallina* Sealy 短蕊茶组 (Sect. *Brachyandra* H. T. Chang)
38. *C. amplexifolia* Merr. et Chun
39. *C. pilosperma* S. Y. Liang
40. *C. corallina* (Gagnep.) Sealy
41. *C. nematodea* (Gagnep.) Sealy
42. *C. nervosa* (Gagnep.) H. T. Chang
43. *C. gilberti* (Achev.) Sealy
44. *C. parviflora* Merr. et Chun ex Sealy
45. *C. xanthochroma* K. M. Feng et L. S. Xie
46. *C. pubicosta* Merr.
- (VII) Sect. *Theopsis* Cohen Stuart 连蕊茶组
47. *C. stuartiana* Sealy
48. *C. forrestii* (Diels) Coh. Stuart
- var. *forrestii*
 - var. *acutisepala* (Tsai et Feng) H. T. Chang
 - var. *pentamera* (H. T. Chang) Ming, comb. nov. (*C. pentamera* H. T. Chang, Tax. Gen. Camellia 90. 1981)
49. *C. crassipes* Sealy
50. *C. cuspidata* (Kochs) Wright ex Gard.
- var. *cuspidata*
 - var. *grandiflora* Sealy
 - var. *chekiangensis* Sealy
 - var. *trichandra* (H. T. Chang) Ming, comb. nov. (*C. trichandra* H. T. Chang,

Tax. Gen. Camellia 168, 1981)

51. *C. viridicalyx* H. T. Chang et S. Y. Liang ex H. T. Chang
 var. *viridicalyx*
 var. *linearifolia* Ming (see the text)
52. *C. glabricostata* Ming (see the text)
53. *C. longicalyx* H. T. Chang
54. *C. synaptica* Sealy
 var. *synaptica*
 var. *parviovata* (H. T. Chang) Ming, comb. nov. (*C. parviovata* H. T. Chang,
 Tax. Gen. Camellia 163, 1981)
55. *C. costei* Lévl
56. *C. tsaii* Hu
57. *C. lutchuensis* T. Ito
 var. *lutchuensis*
 var. *minutiflora* (H. T. Chang) Ming, comb. nov. (*C. minutiflora* H. T. Chang,
 Tax. Gen. Camellia 140, 1981)
58. *C. rosthorniana* Hand. - Mazz.
59. *C. euryoides* Lindl.
 var. *euryoides*
 var. *nokoensis* (Hayata) Ming, comb. nov. (*C. nokoensis* Hayata, Ic. Pl. Formos. 8:
 10, t. 2. 1919)
60. *C. trichoclada* (Rehd.) Chien
61. *C. fraterna* Hance
62. *C. transarisanensis* (Hayata) Coh. Stuart
63. *C. tsingpienensis* Hu
 var. *tsingpienensis*
 var. *pubisepala* H. T. Chang
 var. *macrophylla* Ming
64. *C. cupiformis* Ming
65. *C. elongata* (Rehd. et Wils.) Rehd.
- (VIII) Sect. *Eriandria* Coh. Stuart 毛蕊茶组 [*Thea* Sect. *Camelliopsis* Pierre; *Camelliastrum* Nakai; *Camellia* Sect. *Camelliopsis* (Pierre) Sealy]
66. *C. punctata* (Kochs) Coh. Stuart
67. *C. lawii* Sealy
68. *C. villicarpa* Chien
69. *C. assimiloides* Sealy
70. *C. candida* H. T. Chang
71. *C. caudata* Wall.

var. *caudata*var. *gracilis* (Hemsl.) Yamamoto ex H. Keng72. *C. salicifolia* Champ.73. *C. melliana* Hand. - Mazz.74. *C. cordifolia* (Metc.) Nakaivar. *cordifolia*var. *glabrisepala* MingII. Subgen. *Camellia* 山茶亚属 (Subgen. *Protocamellia* H. T. Chang)(IX) Sect. *Heterogenea* Sealy 离蕊茶组 (Sect. *Pseudocamellia* Sealy; Sect. *Furfuracea* H. T. Chang; Sect. *Protocamellia* H. T. Chang)75. *C. pubifurfuracea* Y. C. Zhong76. *C. yunnanensis* (Pitart ex Diels) Coh. Stuartvar. *yunnanensis*var. *camellioides* (Hu) Ming, comb. nov. (*Pyrenaria camellioides* Hu in Bull. Fan Mem. Inst. Biol. Bot. 8: 136. 1938)77. *C. henryana* Coh. Stuartvar. *henryana*var. *trichocarpa* (H. T. Chang) Ming, comb. nov. [*C. trichocarpa* H. T. Chang, Tax. Gen. Camellia 45. 1981; *C. yunnanensis* var. *trichocarpa* (Chang) Ming; *C. henryana* var. *pilocarpa* Ming]78. *C. tenii* Sealy79. *C. fleuryi* (Achev.) Sealy80. *C. szechuanensis* Chi81. *C. paucipunctata* (Merr. et Chun) Chun82. *C. gaudichaudii* (Gagnep.) Sealy83. *C. granthamiana* Sealy84. *C. crapnelliana* Tutcher85. *C. furfuracea* (Merr.) Coh. Stuartsubsp. *furfuracea*var. *furfuracea*var. *latipetiolata* (Chi) Ming, comb. nov. (*C. latipetiolata* Chi in Sunyats. 7 (1 ~ 2): 18. 1948)var. *shanglinensis* Ming (see the text)subsp. *megacarpa* (Elmer) Ming, comb. nov. (*Thea megacarpa* Elmer, Leaflets Philippine Bot. 5: 1842. 1913)86. *C. wardii* Kobuskivar. *wardii*var. *muricatula* (H. T. Chang) Ming

87. *C. szemaoensis* H. T. Chang

88. *C. pachyandra* Hu

89. *C. mileensis* Ming

var. *mileensis*

var. *microphylla* Ming

(X) Sect. *Stereocarpus* (Pierre) Sealy 实果茶组 (*Thea* Sect. *Stereocarpus* Pierre;
Sect. *Luteoflora* H. T. Chang)

90. *C. dormoyana* (Pierre) Sealy

91. *C. pubipetala* Y. Wan et S. Z. Huang

92. *C. luteoflora* Y. K. Li ex H. T. Chang

(XI) Sect. *Tuberculata* H. T. Chang 瘤果茶组

93. *C. tuberculata* Chien

var. *tuberculata*

var. *atuberculata* (H. T. Chang) Ming

94. *C. pyxidiacea* Z. R. Xu, F. P. Chen et C. Y. Deng

var. *pyxidiacea*

var. *rubituberculata* (Lin et Lu) Ming

95. *C. anlungensis* H. T. Chang

var. *anlungensis*

var. *acutiperulata* (H. T. Chang et Ye) Ming

96. *C. ilicifolia* Y. K. Li ex H. T. Chang

var. *ilicifolia*

form. *rubimuricata* (Chang et Xu) Ming

var. *neriifolia* (H. T. Chang) Ming

97. *C. rhytidocarpa* H. T. Chang et S. Y. Liang ex H. T. Chang

var. *rhytidocarpa*

var. *microphylla* Y. C. Zhong

98. *C. parvimiricata* H. T. Chang

var. *parvimiricata*

var. *songtaoensis* K. M. Lan et H. H. Zhang ex Ming

var. *hupehensis* (H. T. Chang) Ming

(XII) Sect. *Camellia* 山茶组

99. *C. hongkongensis* Seemann

100. *C. azalea* C. F. Wei

101. *C. subintegra* P. C. Huang ex H. T. Chang

102. *C. chekiangoleosa* Hu

form. *tanglii* P. L. Chiu

103. *C. japonica* L.

var. *japonica*

var. *rusticana* (Honda) Ming

104. *C. semiserrata* Chi

var. *semiserrata*

form. *albiflora* (Hu et Huang) Ming

var. *magnocarpa* Hu et Huang ex Hu

105. *C. edithae* Hance

106. *C. saluenensis* Staph ex Bean

107. *C. pitardii* Coh. Stuart

var. *pitardii*

form. *alba* (H. T. Chang) Ming

var. *cryptoneura* (H. T. Chang) Ming, comb. nov. (*C. cryptoneura* H. T. Chang,
Tax. Gen. Camellia 75, 1981; *C. setiperulata* H. T. Chang et Lee ex H. T. Chang;
C. lungshenensis H. T. Chang)

var. *variabilis* (Chang et Wen) Ming

108. *C. reticulata* Lindl.

form. *albescens* (H. T. Chang) Ming

109. *C. polyodonta* How ex Hu

var. *polodonta*

form. *alba* Ming

var. *longicaudata* (Chang et Liang) Ming

110. *C. mairei* (L'evl.) Melchior

var. *mairei*

form. *alba* (Chang) Ming

var. *lapidea* (Wu) Sealy

var. *velutina* Sealy

(XIII) Sect. *Paracamellia* Sealy 油茶组 (Sect. *Oleifera* H. T. Chang)

111. *C. grijsii* Hance

var. *grijsii*

var. *shensiensis* (H. T. Chang) Ming

112. *C. fluviatilis* Hand. - Mazz.

var. *fluviatilis*

var. *megalantha* (Chang) Ming, comb. nov. (*C. kissi* var. *megalantha*
H. T. Chang, Tax. Gen. Camellia 35, 1981)

113. *C. gauchowensis* H. T. Chang

114. *C. oleifera* Abel

115. *C. sasanqua* Thunb.

116. *C. kissi* Wall.

var. *kissi*

var. *confusa* (Craib.) Ming

117. *C. brevistyla* (Hayata) Coh. Stuart

var. *brevistyla*

var. *microphylla* (Merr.) Ming, comb. nov. (*Thea micarophylla* Merr. in Journ. Arn. Arb. 8: 9 1927)

(XIV) Sect. *Calpandria* (Bl.) Coh. Stuart 管蕊茶组 (*Calpandria* Blume)

118. *C. lanceolata* (Bl.) Seemann (*Calpandria lanceolata* Bl.)

var. *lanceolata*

var. *mollis* (Merr.) Ming, comb. nov. (*Thea lanceolata* var. *mollis* Merr., Enum Philipp. Pl. 3: 69. 1923)

119. *C. connata* (Craib) Craib

New Taxa

老挝茶 新种

Camellia sealyana Ming, sp. nov.

Thea laotica Gagnep. in Not. Syst. 10: 128. 1942 et in Suppl. Fl. Gen. Indochine 1: 314. 1943, quoad Poilane 13743. — *Camellia* sp. Sealy, Rev. Gen. Camellia 138, fig. 64. 1958.

Species *C. sinense* var. *dehungensi* (Chang et Chen) Ming affinis, sed foliis subtus rubro-puncticulatis, stylis 3 liberis recedit.

Fruit circ. 2.5 m altus; ramuri hornotini purpuri hirtelli, rami annotini fulvi glabri; gemmi sericei. Folia tenuiter coriacea oblonga vel oblongo-elliptica 6 ~ 8.5 cm longa, 2 ~ 3.4 cm lata, apice obtusa basi cuneata vel late cuneata, margine serrata, supra in sicca nitida subtus viridula, sparse rubro-puncticulata, pilosa, costis supra impressis subtus elevatis, nervis lateralibus utrinque 5 ~ 7-jugis supra conspicuis vel leviter prominentis subtus elevatis; Petioli 3 ~ 6 mm longi hirtelli. Flores axillares solitarii, pedicellis circ. 3 mm longis sparse pubescentibus, bracteolis 2, caducis; sepala 4 (~ 5) inaequalia suborbiculata 4 ~ 6 mm longa margine membranacea extus glabra intus sericea; petala staminasque decidua; ovarium ovatum glabrum 3-locularum, stylis 3, liberis circ. 6 mm longis glabris. Capsula ignota.

Laos: Saravane Prov., between L. Sung and L. Loi, Apr. 13, 1887. Poilane 13743 (Type, P).

线叶连蕊茶 新变种

Camellia viridicalyx H. T. Chang var. *linearifolia* Ming, var. nov.

A var. *viridicalyx* recedit foliis minoribus, linearis-lanceolatis circ. 5 cm longis, 0.9 ~ 1.2 cm latis, floribus minoribus circ. 1 cm diametro, pedicellis glacialis 4 ~ 5 mm longis, bracteolis minoribus 0.5 mm longis, sepalis 1 ~ 1.5 mm longis glabris, filamentis glabris.

Guizhou (贵州): Lodian (罗甸), Bamou (八茂), Zhang Yung-tian (张永田) 246

(Type, PE), 1947 (PE)

秃肋连蕊茶 新种

Camellia glabricostata Ming, sp. nov.

Species similis *C. tsingpienensi* Hu, sed gemmis ramulisque glabris, foliis basi cuneatis, costis petiolisque glabris, floribus minoribus rubellis.

Futex vel Arbor parva 1~5 m altus, ramuli hornotini purpuri, ramuli gracili, purpure-fulvi; gemmi glabri. Folia chartacea, oblonga 5~9.5 cm longa, 2~3.5 cm lata, apice caudata, basi late cuneata, margine serrata, supra atro-viridia, costis impressis, subtus chlorotica costis elongatis, utrinque glabra, nervis lateralibus 6~9-jugis, utrinque prominentis; petioli 3~5 mm longi glabri. Flores subterminales vel axillares solitarii, pedicellis circ. 2 mm longis, bracteolis 5 late ovatis, 0.5~1.5 mm longis, extus glabris, margina ciliatis; sepala 5 sublibera, ovata vel elliptico-ovata, 2~2.5 mm longa extus albo-puberula, margine ciliata; petala 5 obovato-elliptica 7~8 mm, basi coalita stamina, circ. 6 mm longa filamentis exterioribus coalitis, superior liberis dense pilosis; ovarium globosum glabrum 3-locularum, stylis circ. 6 mm longis apice 3-fidis. Capsula ignota.

Guangxi (广西): Pingxiang (凭祥), W.J.Zhang (张文驹) 532 (Typus, KUN)

上林糙果茶 新变种

Camellia furfuracea (Metc.) Coh. Stuart var. **shanglinensis** Ming, var. nov.

A var. *furfuracea*, recedit foliis elliptico-ovatis 7.5~11.5 cm, 3.5~5 cm, apice caudato-acuminatis, basi late cuneatis vel subrotundatis, margine subintegris, supra nervis lateralibus reticulatisque prominentis subtus pallidis.

Guangxi (广西): Shanglin (上林) July 24, 1984, Y.C.Zhong (钟业聪) 无号, Herb.KUN no 54678 (Type, KUN).

References

- Chang H T, 1982. Luteoflora, A new section of *Camellia*. *Act Sci Nat Univ Sunyats*, 21 (3): 72~73
 Chang H T, 1981. A Taxonomy of the genus *Camellia*, Guangdong: The Editorial Staff of Journal of Sun Yat-sen University.
 Chang H T, 1991. A Revision of the Section Chrysanthia of *Camellia*. *Act Sci Nat Univ Sunyats*, 30 (2): 76~84.
 Chang H T, 1991. A Classification on the section of Tuberculata of *Camellia*. *Act Sci Nat Univ Sunyats*, 30 (4): 86~91.
 Chang H T, 1996. A review on the Section Chrysanthia and Archeacamellia of the genus *Camellia*. *Act Sci Nat Univ Sunyats*, 35 (1): 77~80.
 Melchior H, 1925. Theaceae. Nat. Pflanzenfam. Ed. 2, 21: 127~131.
 Ming T L, 1992. A Revision of *Camellia* Sect. Thea. *Act Bot Yunn*, 14 (2): 115~132.
 Ming T L, Zhang W J, 1993. On taxonomic problems of section Archeacamellia and section Chrysanthia in the genus *Camellia*. *Act Bot Yunn*, 15 (1): 1~15.
 Ming T L, Zhong Y C, 1993. A revision of genus *Camellia* Sect. *Tuberculata*. *Act Bot Yunn*, 15 (2): 123~130.
 Ming T L, 1994. Sect. *Cylindrica*, one new section of genus *Camellia* (Theaceae). *Act Bot Yunn*, 16 (4): 343~344.
 Ming T L, 1998. The Classification, differentiation and distribution of the genus *Camellia* Sect. *Camellia*. *Act Bot Yunn*, 20 (2): 127~148.
 Ming T L, Zhang W J, 1996. The evolution and distribution of genus *Camellia*. *Act Bot Yunn*, 18 (1): 1~13.
 Sealy J R, 1958. A revision of the genus *Camellia*. London: The Royal Horticultural Society. 1~239.