

Table 1 ; Comparison between detailed classification of Genus *Gymnocalycium* by AGG and other rough classifications (About *Gymnocalcia*, *Reducta*, *Hyptiacantha* Group(Aggregat))

| Classification of Genus <i>Gymnocalycium</i> by AGG and others | Habitat | Synonym (depends on AGG etc.) | Synonym of rough classification by Mr. Graham Charles | Rough classification and Synonym By Dr. D.Hunt, Dr. E.Anderson and Dr.R.Kiesling < [H] Hunt, [A] Anderson, [K] Kiesling > |
|--|---|---|---|---|
| I-a (H.Till) Series <i>Gymnocalycium</i>-Aggregat <i>Gymnocalcia</i> | | | Subgenus <i>Gymnocalycium</i> | <i>G. gibbosum</i> (Haworth) Pfeiffer ex Mittler [H], [A], [K] |
| <i>G. chubutense</i> (Spegazzini) Spegazzini | Chubut-Argentina | <i>G. gibbosum</i> ssp. <i>chubutense</i> (Spegazzini) Papsch <i>G. chubutense</i> (Spegazzini) Spegazzini <i>G. leonense</i> nom. nud (Echinocactus leonensis Cels) | <i>G. gibbosum</i> ssp. <i>gibbosum</i> (Haworth) Pfeiffer ex Mittler | Synonym <i>G. gibbosum</i> f. <i>ferox</i> (Labouret) Slaba nom. inval. [H] <i>G. gibbosum</i> v. <i>ferox</i> (Labouret) Y.Ito nom. inval. [H], [K] <i>G. gibbosum</i> v. <i>brachypetalum</i> (Spegazzini) Papsch [H], [A] <i>G. gibbosum</i> v. <i>celisianum</i> (Labouret) Y.Ito nom. inval. [K] <i>G. gibbosum</i> v. <i>fenellii</i> (Haage ex Queh) Y.Ito nom. inval. [K] <i>G. chubutense</i> (Spegazzini) Spegazzini [A], [K] <i>G. gibbosum</i> ssp. <i>ferox</i> (Labouret ex Rümpler) Papsch [H], [A], [K] |
| <i>G. chubutense</i> v. <i>dubiorum</i> (Halda & Milt) H.Till | Chubut-Argentina | <i>G. dubiorum</i> Halda & Milt | <i>G. gibbosum</i> ssp. <i>gibbosum</i> (Haworth) Pfeiffer ex Mittler | <i>G. gibbosum</i> v. <i>brachypetalum</i> (Spegazzini) Papsch [H], [A] |
| <i>G. gibbosum</i> (Haworth) Pfeiffer ex Mittler | Buenos Aires-Argentina Rio Negro-Argentina La Pampa-Argentina | <i>Cactus gibbosus</i> Haworth <i>Cereus gibbosus</i> (Haworth) Pfeiffer | <i>G. gibbosum</i> ssp. <i>gibbosum</i> (Haworth) Pfeiffer ex Mittler | <i>G. gibbosum</i> v. <i>celisianum</i> (Labouret) Y.Ito nom. inval. [K] <i>G. gibbosum</i> v. <i>fenellii</i> (Haage ex Queh) Y.Ito nom. inval. [K] <i>G. chubutense</i> (Spegazzini) Spegazzini [A], [K] <i>G. gibbosum</i> ssp. <i>ferox</i> (Labouret ex Rümpler) Papsch [H], [A], [K] |
| <i>G. gibbosum</i> f. <i>cerebriformis</i> (Spegazzini) Papsch | Buenos Aires-Argentina Rio Negro-Argentina | | <i>G. gibbosum</i> ssp. <i>gibbosum</i> (Haworth) Pfeiffer ex Mittler | <i>G. reductum</i> (Link) Pfeiffer ex Mittler [A] <i>G. gibbosum</i> v. <i>gerardii</i> Y.Ito nom. inval. [A] <i>G. borthii</i> Koop ex H.Till [K] <i>G. strigilium</i> Jeggel ex H.Till [K] <i>G. deeszanum</i> Döhl: [K] |
| <i>G. gibbosum</i> v. <i>brachypetalum</i> (Spegazzini) Papsch | Rio Negro-Argentina Mendoza-Argentina La Pampa-Argentina | <i>G. gibbosum</i> v. <i>nigrum</i> Backeberg nom. illeg. <i>G. brachypetalum</i> Spegazzini | <i>G. gibbosum</i> ssp. <i>gibbosum</i> (Haworth) Pfeiffer ex Mittler | <i>G. gibbosum</i> ssp. <i>gibbosum</i> (Haworth) Pfeiffer ex Mittler |
| <i>G. gibbosum</i> ssp. <i>ferox</i> (Labouret ex Rümpler) Papsch | Chubut-Argentina | <i>G. gibbosum</i> v. <i>ferox</i> (Labouret) Y.Ito nom. inval. <i>G. gibbosum</i> f. <i>ferox</i> (Labouret) Slaba nom. inval. | <i>G. gibbosum</i> ssp. <i>gibbosum</i> (Haworth) Pfeiffer ex Mittler | <i>G. gibbosum</i> ssp. <i>gibbosum</i> (Haworth) Pfeiffer ex Mittler |
| <i>G. gibbosum</i> ssp. <i>radeki</i> Halda & Milt | Rio Negro-Argentina | <i>G. gibbosum</i> v. <i>brachypetalum</i> (Spegazzini) Papsch <i>G. gibbosum</i> v. <i>radeki</i> nom.nud. | <i>G. gibbosum</i> ssp. <i>gibbosum</i> (Haworth) Pfeiffer ex Mittler | <i>G. gibbosum</i> ssp. <i>borthii</i> (Koop ex H.Till) Chares [H] |
| <i>G. gibbosum</i> ssp. <i>radovani</i> Halda & Milt | Rio Negro-Argentina | <i>G. gibbosum</i> v. <i>radovani</i> nom. nud. | <i>G. gibbosum</i> ssp. <i>gibbosum</i> (Haworth) Pfeiffer ex Mittler | Synonym <i>G. borthii</i> Koop ex H.Till [H] |
| I-a (H.Till) Series <i>Gymnocalycium</i>-Aggregat <i>Reducta</i> | | | Subgenus <i>Gymnocalycium</i> | <i>G. reductum</i> (Link) Pfeiffer ex Mittler [H], [K] |
| <i>G. neuhuberi</i> H.Till & W.Till | San Luis-Argentina | | <i>G. neuhuberi</i> H.Till & W.Till | <i>G. reductum</i> (Link) Pfeiffer ex Mittler [H], [K] |
| <i>G. reductum</i> (Link) Pfeiffer ex Mittler | Buenos Aires-Argentina La Pampa-Argentina | <i>Cactus reductus</i> Link <i>G. gibbosum</i> v. <i>albispinum</i> Cichra nom. inval. <i>G. gibbosum</i> v. <i>leucacanthum</i> (Schumann) Y.Ito nom. inval. <i>G. gibbosum</i> v. <i>nobile</i> (Schumann) Y.Ito nom. inval. <i>G. gibbosum</i> v. <i>polygonum</i> (Schumann) Y.Ito nom. inval. <i>G. gibbosum</i> v. <i>rostratum</i> Fleischer nom. inval. <i>G. gibbosum</i> v. <i>schlumbergeri</i> (Schumann) Y.Ito nom. inval. <i>G. mackieanum</i> (Hooker) Metzging <i>G. gibbosum</i> v. <i>reductum</i> (Link) Fric nom. nud. <i>G. gibbosum</i> v. <i>gerardii</i> Y.Ito nom. inval. | <i>G. reductum</i> ssp. <i>reductum</i> (Link) Pfeiffer ex Mittler | Synonym <i>G. mackieanum</i> (Hooker) Metzging [H] <i>G. platense</i> v. <i>ventanicola</i> (Spegazzini) Kiesling [K] <i>G. gibbosum</i> v. <i>nobile</i> (Schumann) Y.Ito nom. inval. [K] <i>G. schatzianum</i> Strigl & W.Till [K] <i>G. reductum</i> v. <i>platense</i> (Speg.) Kiesling [K] |
| <i>G. reductum</i> v. <i>leucodictyon</i> (Salm Dyck) Papsch | Buenos Aires-Argentina | <i>G. gibbosum</i> v. <i>leucodictyon</i> (Schumann) Y.Ito nom. inval. <i>G. gibbosum</i> v. <i>caespitosum</i> Fric ex Fleischer nom. inval. <i>G. gibbosum</i> v. <i>caespitosum</i> f. <i>intermedium</i> Fleischer nom. inval. <i>G. gibbosum</i> v. <i>caespitosum</i> f. <i>minimum</i> Fleischer nom. inval. | <i>G. reductum</i> ssp. <i>reductum</i> (Link) Pfeiffer ex Mittler | Synonym <i>G. platense</i> (Spegazzini) Britton & Rose [K] <i>G. hyptiacanthum</i> (Lemaire) Britton & Rose <sensu W.Papsch> <i>G. leptanthum</i> circulates by wrong name <i>G. platense</i>. |
| <i>G. reductum</i> v. <i>platense</i> (Spegazzini) Kiesling | Buenos Aires-Argentina | <i>G. platense</i> (Spegazzini) Britton & Rose <i>G. hyptiacanthum</i> (Lemaire) Britton & Rose <sensu W.Papsch> <i>G. leptanthum</i> circulates by wrong name <i>G. platense</i>. | <i>G. reductum</i> ssp. <i>reductum</i> (Link) Pfeiffer ex Mittler | <i>G. reductum</i> ssp. <i>leanum</i> (Hooker) Papsch [H] |
| <i>G. reductum</i> v. <i>platense</i> f. <i>ventanicolum</i> (Spegazzini) H.Till ined. | Buenos Aires-Argentina | <i>G. gibbosum</i> v. <i>ventanicolum</i> (Spegazzini) Y.Ito nom. inval. <i>G. gibbosum</i> v. <i>ventanicolum</i> (Spegazzini) Kiesling <i>G. platense</i> v. <i>ventanicola</i> (Spegazzini) Kiesling | <i>G. reductum</i> ssp. <i>reductum</i> (Link) Pfeiffer ex Mittler | Synonym <i>G. schatzianum</i> Strigl & W.Till [H] <i>G. leanum</i> (Hooker) Britton & Rose [A] |
| <i>G. reductum</i> ssp. <i>schatzianum</i> (Strigl & W.Till) H.Till ined. | Buenos Aires-Argentina | <i>E. leanus</i> Hooker <i>G. leanum</i> (Hooker) Britton & Rose <i>G. gibbosum</i> v. <i>balcensis</i> Vliet nom. nud. <i>G. schatzianum</i> Strigl & W.Till <i>G. mardelplatense</i> nom. nud. <i>G. hyptiacanthum</i> v. <i>mardelplatense</i> Papsch nom. nud. <i>G. reductum</i> ssp. <i>leanum</i> (Hooker) Papsch <i>G. reductum</i> ssp. <i>leanum</i> v. <i>schatzianum</i> (Strigl & W.Till) Papsch | <i>G. reductum</i> ssp. <i>leanum</i> (Hooker) Papsch | <i>G. schroederianum</i> Van Osten [H], [A], [K] |
| <i>G. reductum</i> ssp. <i>sibalii</i> (Halda & Milt) Neuherber | La Pampa-Argentina | <i>G. sibalii</i> Halda & Milt <i>G. friedlii</i> nom. nud. | <i>G. reductum</i> ssp. <i>reductum</i> (Link) Pfeiffer ex Mittler | Synonym <i>G. schroederianum</i> ssp. <i>bayense</i> Kiesling [H], [A] <i>G. schroederianum</i> ssp. <i>paucicostatum</i> Kiesling [H], [A] <i>G. schroederianum</i> ssp. <i>bayense</i> Kiesling [K] |
| <i>G. gibbosum</i> ssp. <i>ferdinandii</i> Halda, Malina & Milt | Buenos Aires-Argentina | <i>G. reductum</i> (Link) Pfeiffer ex Mittler | <i>G. reductum</i> ssp. <i>reductum</i> (Link) Pfeiffer ex Mittler | <i>G. schroederianum</i> ssp. <i>paucicostatum</i> Kiesling [K] |
| <i>G. gibbosum</i> ssp. <i>gastonii</i> Halda & Milt | Buenos Aires-Argentina | <i>G. reductum</i> (Link) Pfeiffer ex Mittler | <i>G. reductum</i> ssp. <i>reductum</i> (Link) Pfeiffer ex Mittler | <i>G. schroederianum</i> ssp. <i>boesii</i> Kiesling, Marchesi, Ferrari [K] |
| I-a (H.Till) Series <i>Gymnocalycium</i> Aggregat <i>Hyptiacantha</i> | | | Subgenus <i>Gymnocalycium</i> | Synonym <i>G. erolesii</i> Neuherber & L.Bercht |
| <i>G. hyptiacanthum</i> (Lemaire) Britton & Rose | Buenos Aires-Argentina | <i>Echinocactus hyptiacanthus</i> Lemaire <i>G. hyptiacanthum</i> v. <i>eleutheracanthus</i> (Monville) Y.Ito nom. inval. <i>G. hyptiacanthum</i> v. <i>megalothelos</i> (Monville) Y.Ito nom. inval. <i>G. hyptiacanthum</i> v. <i>nitidum</i> (Monville) Y.Ito nom. inval. <i>G. schroederianum</i> ssp. <i>bayense</i> Kiesling < sensu W.Papsch> | <i>G. schroederianum</i> Osten (=G. <i>schroederianum</i> ssp. <i>paucicostatum</i> R.Kiesling) | |
| <i>G. hyptiacanthum</i> ssp. <i>schroederianum</i> (Osten) Papsch | Rio Negro-Uruguay Corrientes-Argentina Entre Rios-Argentina | <i>G. schroederianum</i> Osten <i>G. schroederianum</i> ssp. <i>boesii</i> R.Kiesling, Marchesi & Ferrari (=G. <i>erolesii</i> Neuherber & L.C. Bercht) | <i>G. schroederianum</i> ssp. <i>boesii</i> R.Kiesling, Marchesi & Ferrari | |
| <i>G. hyptiacanthum</i> ssp. <i>paucicostatum</i> (R.Kiesling) Papsch | Corrientes-Argentina | <i>G. schroederianum</i> ssp. <i>bayense</i> R.Kiesling <i>G. schroederianum</i> ssp. <i>paucicostatum</i> R.Kiesling | <i>G. schroederianum</i> ssp. <i>bayense</i> Kiesling | |

literature

The Magazine of *Gymnocalycium* By the Arbeitsgruppe *Gymnocalycium* (AGG) 1991-201
David Hunt, Nigel Taylor, Graham Charles, and their supported team The New Cactus Lexicon 2006 Editorial Committee
E. Anderson The Cactus Family 2001
R. Kiesling Cat. de las Plantas Vasculares de la Republica Argentina 1999, Instituto de Botanica Darwinic 2007 Web Page
Graham Charles *Gymnocalycium* In Habitat and Culture 2007

A Red character : Texta that should be noted, especially.
A blue character : Texta that should be noted.

This table is designed by Takashi Shimada

Table 2 ; Comparison between detailed classification of Genus *Gymnocalycium* by AGG and other rough classifications (About Lafaldensia, Quehliana Group(Aggregat))

| Classification of Genus <i>Gymnocalycium</i> by AGG and others | Habitat | Synonym (depends on AGG etc.) | Synonym of rough classification by Mr. Graham Charles | Rough classification and Synonym By Dr. D.Hunt, Dr. E.Anderson and Dr.R.Kiesling < [H] Hunt, [A] Anderson, [K] Kiesling > |
|---|---|---|--|--|
| I-b (H.Till) Series Lafaldense-Aggregat Lafaldensia | | | Subgenus <i>Gymnocalycium</i> | <i>G. andreae</i> (Boedeker) Backeberg [H], [K], [A] |
| <i>G. andreae</i> (Boedeker) Backeberg | Cordoba-Argentina | <i>G. andreae</i> v. <i>doppianum</i> nom. nud. <i>G. andreae</i> v. <i>fechseri</i> H.Till <i>G. andreae</i> v. <i>grandiflorum</i> Krainz & Andreae, p.p. | <i>G. andreae</i> (Boedeker) Backeberg | Synonym <i>G. andreae</i> f. <i>svecianum</i> Pazout ex Till [K] <i>G. andreae</i> v. <i>grandiflorum</i> Krainz & Andreae [K] |
| <i>G. andreae</i> v. <i>grandiflorum</i> Krainz & Andreae | Cordoba-Argentina | <i>G. andreae</i> (Boedeker) Backeberg | <i>G. andreae</i> (Boedeker) Backeberg | <i>G. andreae</i> ssp. <i>carolinense</i> Neuhuber [A] |
| <i>G. andreae</i> v. <i>longispinum</i> Rausch | Cordoba-Argentina | <i>G. andreae</i> v. <i>longispinum</i> Rausch nom. nud. | <i>G. andreae</i> (Boedeker) Backeberg | Synonym <i>G. carolinense</i> (Neuhuber) Neuhuber |
| <i>G. andreae</i> subsp. <i>pabloi</i> Neuhuber | Cordoba-Argentina | <i>G. andreae</i> v. <i>grandiflorum</i> Krainz & Andreae, p.p. | <i>G. andreae</i> (Boedeker) Backeberg | |
| <i>G. baldianum</i> (Spegazzini) Spegazzini | Catamarca Argentina | <i>G. sanguiniflorum</i> (Werdermann) Werdermann, p.p. <i>G. venturianum</i> Fric ex Backeberg, p.p. | <i>G. baldianum</i> (Spegazzini) Spegazzini | <i>G. baldianum</i> (Spegazzini) Spegazzini [H], [K], [A] |
| <i>G. baldianum</i> v. <i>venturianum</i> Fric ex Backeberg | Catamarca Argentina | <i>G. venturianum</i> Fric ex Backeberg | <i>G. baldianum</i> (Spegazzini) Spegazzini | Synonym <i>G. baldianum</i> v. <i>albiflorum</i> Bercht [K] <i>G. rosae</i> H.Till [H] <i>G. sanguiniflorum</i> (Werdermann) Werdermann [K], [A] <i>G. venturianum</i> Fric ex Backeberg [K] |
| <i>G. baldianum</i> ssp. <i>sanguiniflorum</i> (Werdermann) Bercht | Catamarca Argentina | <i>G. sanguiniflorum</i> (Werdermann) Werdermann <i>G. marianae</i> Perea, Ferrari, Penas & Kiesling | <i>G. baldianum</i> (Spegazzini) Spegazzini | |
| <i>G. bruchii</i> (Spegazzini) Hosseus | Cordoba- Argentina San Luis- Argentina | <i>G. albispinum</i> Backeberg <i>G. lafaldense</i> Vaupel | <i>G. bruchii</i> (Spegazzini) Hosseus | <i>G. bruchii</i> (Spegazzini) Hosseus [H], [K], [A] |
| <i>G. bruchii</i> v. <i>glaucum</i> Neuhuber | Cordoba-Argentina | | | Synonym |
| <i>G. bruchii</i> v. <i>hossei</i> (Backeb. ex Oehme) Backeberg | Cordoba-Argentina | <i>G. bruchii</i> ssp. <i>lafaldense</i> (Vaupel) Neuhuber | <i>G. bruchii</i> (Spegazzini) Hosseus | <i>G. albispinum</i> Backeberg [A] <i>G. andreae</i> ssp. <i>carolinense</i> Neuhuber [H], [K] <i>G. bruchii</i> v. <i>enorme</i> (Oehme) Backeberg [K] <i>G. lafaldense</i> Vaupel [K], [A] <i>G. lafaldense</i> f. <i>hossei</i> (Backeberg) Oehme [K] |
| <i>G. bruchii</i> v. <i>niveum</i> Rausch | Cordoba-Argentina | <i>G. albispinum</i> Backeberg | <i>G. bruchii</i> (Spegazzini) Hosseus | <i>G. bruchii</i> v. <i>brigittae</i> Piltz [K] |
| <i>G. bruchii</i> ssp. <i>atroviride</i> Neuhuber | Cordoba-Argentina | | | |
| <i>G. bruchii</i> ssp. <i>cumbretense</i> Neuhuber | Cordoba-Argentina | | | |
| <i>G. bruchii</i> ssp. <i>elegans</i> Neuhuber | Cordoba-Argentina | | | |
| <i>G. bruchii</i> ssp. <i>implexum</i> Neuhuber | Cordoba-Argentina | | | |
| <i>G. bruchii</i> ssp. <i>lacumense</i> Neuhuber | Cordoba-Argentina | | | |
| <i>G. bruchii</i> ssp. <i>lafaldense</i> (Vaupel) Neuhuber | Cordoba- Argentina | <i>G. lafaldense</i> Vaupel <i>G. lafaldense</i> f. <i>deviatum</i> Oehme <i>G. lafaldense</i> f. <i>enorme</i> Oehme <i>G. lafaldense</i> f. <i>evolvens</i> Oehme <i>G. lafaldense</i> f. <i>fraternum</i> Oehme <i>G. lafaldense</i> f. <i>hossei</i> (Backeberg) Oehme <i>G. bruchii</i> v. <i>enorme</i> (Oehme) Backeberg <i>G. bruchii</i> v. <i>spinosissimum</i> Haage jr.) Y.Ito nom. inval. | <i>G. bruchii</i> (Spegazzini) Hosseus | <i>G. bruchii</i> v. <i>niveum</i> Rausch [K] Synonym <i>G. albispinum</i> Backeberg [K] <i>G. rosae</i> H.Till [A] <i>G. erinaceum</i> Lambert [H], [A], [K] <i>G. robustum</i> R. Kiesling, Ferrari & Metzng [H], [K] Synonym <i>G. quehlianum</i> (F.Haage ex Quehl) Vaupel ex Hosseus [H] |
| <i>G. bruchii</i> ssp. <i>matzneri</i> (Rausch) Neuhuber | Cordoba-Argentina | <i>G. andreae</i> ssp. <i>matzneri</i> Rausch | <i>G. andreae</i> (Boedeker) Backeberg | <i>G. quehlianum</i>(F.Haage ex Quehl) Vaupel ex Hosseus [A], [K] |
| <i>G. bruchii</i> ssp. <i>matzneri</i> f. <i>svecianum</i> Pazout ex Till) Neuhuber | Cordoba-Argentina | <i>G. andreae</i> f. <i>svecianum</i> Pazout ex Till | <i>G. andreae</i> (Boedeker) Backeberg | Synonym <i>E. quehlianus</i> F. Haage ex Quehl [K] <i>G. asterium</i> v. <i>minimum</i> Pazout) Pazout nom. inval. [K] <i>G. quehlianum</i> v. <i>albispinum</i> Backeberg nom. inval. [K] <i>G. stellatum</i> v. <i>flavispinum</i> Bozing ex H. Till & W. Till [K] <i>G. stellatum</i> v. <i>zantnerianum</i> (Schick) H. Till & W. Till [K] |
| <i>G. bruchii</i> ssp. <i>matzneri</i> v. <i>brigittae</i> Piltz) Neuhuber | Cordoba-Argentina | <i>G. bruchii</i> v. <i>brigittae</i> Piltz | <i>G. bruchii</i> (Spegazzini) Hosseus | <i>G. calochlorum</i> (Boed.) Y.Ito [H], [A], [K] |
| <i>G. bruchii</i> ssp. <i>melojerei</i> Neuhuber | Cordoba-Argentina | | | Synonym <i>G. calochlorum</i> v. <i>proliferum</i> (Backeberg) Backeberg [H], [A], [K] <i>G. proliferum</i> (Backeberg) Backeberg [H], [A] <i>G. papschii</i> H.Till [H] |
| <i>G. bruchii</i> ssp. <i>melojerei</i> v. <i>ruburoalabastrum</i> Neuhuber | Cordoba-Argentina | | | <i>G. leptanthum</i> (Spegazzini) Spegazzini [A], [K] |
| <i>G. bruchii</i> ssp. <i>multicosatum</i> Neuhuber | Cordoba-Argentina | | | |
| <i>G. bruchii</i> ssp. <i>pavlovsky</i> Neuhuber | Cordoba-Argentina | | <i>G. bruchii</i> (Spegazzini) Hosseus | |
| <i>G. bruchii</i> ssp. <i>renatae</i> Neuhuber | Cordoba-Argentina | | | |
| <i>G. bruchii</i> ssp. <i>shimadae</i> Neuhuber | Cordoba-Argentina | | | |
| <i>G. bruchii</i> ssp. <i>susannae</i> Neuhuber | Cordoba-Argentina | | <i>G. bruchii</i> (Spegazzini) Hosseus | |
| <i>G. carolinense</i> (Neuhuber) Neuhuber | San Luis- Argentina | <i>G. andreae</i> subsp. <i>carolinense</i> Neuhuber | <i>G. carolinense</i> (Neuhuber) Neuhuber | Synonym <i>G. calochlorum</i> v. <i>proliferum</i> (Backeberg) Backeberg [H], [A], [K] <i>G. proliferum</i> (Backeberg) Backeberg [H], [A] <i>G. papschii</i> H.Till [H] |
| <i>G. carolinense</i> v. <i>ludwigii</i> Neuhuber | San Luis- Argentina | | | |
| <i>G. carolinense</i> v. <i>ludwigii</i> v. <i>etrebolense</i> Neuhuber | San Luis- Argentina | | | |
| <i>G. raineri</i> H.Till | Catamarca Argentina | | <i>G. baldianum</i> (Spegazzini) Spegazzini | |
| <i>G. rosae</i> H.Till | Salta- Argentina Catamarca-Argentina | <i>G. baldianum</i> v. <i>albiflorum</i> Bercht <i>G. kieslingii</i> Ferrari s.l. | <i>G. kieslingii</i> Ferrari | |
| <i>G. schreiteri</i> H. Till | Salta-Argentina | | | <i>G. platense</i> (Spegazzini) Briton & Rose [A] |
| <i>G. uebelmanianum</i> Rausch | La Rioja- Argentina | | <i>G. uebelmanianum</i> Rausch | |
| I-c (H.Till) Series Quehliana-Aggregat Quehliana | | | Subgenus <i>Gymnocalycium</i> | <i>G. terweeaneanum</i> (Teuq ex Duursma) Borgmann & Piltz [A] |
| <i>G. erinaceum</i> J.G.Lambert | Cordoba- Argentina | | <i>G. erinaceum</i> J.G.Lambert | |
| <i>G. erinaceum</i> v. <i>paucisquamosum</i> Piltz | Cordoba- Argentina | | <i>G. erinaceum</i> J.G.Lambert | <i>G. uebelmanianum</i> Rausch [H], [A], [K] |
| <i>G. erotesi</i> Neuhuber & L. Bercht | Santafe-Argentina | <i>G. schroederianum</i> ssp. <i>boessii</i> Kiesling, Marchesi, Ferrari | <i>G. schroederianum</i> ssp. <i>boessii</i> Kiesling, Marchesi, Ferrari | <i>G. leptanthum</i> ; A name of uncertain application apparently based on a mixture of species [H] <i>G. terweeaneanum</i> ; Synonym of <i>G. bertii</i> Neuhuber [H] <i>G. parvulum</i> ; Adopted by Till for plants resembling the later-named <i>G. calochlorum</i> [H] <i>G. hyptiacanthum</i> ; Another untypifiable name of disputed application, best abandoned. The unsupported neotype proposed by Kiesling [H] <i>G. platense</i> ; A name long-misapplied to plants from Cordoba and best abandoned [H] <i>G. quehlianum</i> and <i>G. stellatum</i> were confused for a long time. We adopt <i>G. robustum</i> for the <i>Ovatiseimneum</i> 's species and <i>G. stellatum</i> for the <i>Trichomoseimneum</i> 's species [H] |
| <i>G. frankianum</i> Rausch ex H.Till & Amerhauser | Santiago de Estero- Argentina | | <i>G. kieslingii</i> Ferrari | |
| <i>G. quehlianus</i> Neuhuber & R. Sperling | Cordoba- Argentina | | <i>G. robustum</i> R. Kiesling, Ferrari & Metzng | |
| <i>G. quehlianum</i> (F.Haage ex Quehl) Vaupel ex Hosseus | Cordoba-Argentina | <i>E. quehlianus</i> F. Haage ex Quehl <i>G. cordobensis</i> nom. nud. <i>G. robustum</i> R. Kiesling, Ferrari & Metzng | <i>G. robustum</i> R. Kiesling, Ferrari & Metzng | |
| <i>G. quehlianum</i> ssp. <i>leptanthum</i> (Speg.) H.Till & Amerhauser | Cordoba-Argentina | <i>G. leptanthum</i> (Spegazzini) Spegazzini <i>G. affine</i> R. Repka (<i>G. leptanthum</i> auct., non Speg. 1925. G. sp. SFDC sensu R. Repka) <i>G. leptanthum</i> circulates by wrong name <i>G. platense</i> . | Names of Uncertain Application | <i>G. affine</i> R. Repka (<i>G. leptanthum</i> auct., non Speg.) Till & Amerhauser (2007) consider the distribution range of <i>G. leptanthum</i> to be an enormous strip of land from the locus classicus (Cosquin) up to the border of the provinces of Cordoba and Santiago del Estero. There date cannot be accepted, particularly because the characteristics by Spegazzini (1905) differ considerably from the plants described here under (<i>R. Repka</i>) |
| <i>G. quehlianum</i> ssp. <i>leptanthum</i> v. <i>calochlorum</i> (Boed.) H.Till & Amerhauser | Cordoba-Argentina | <i>G. calochlorum</i> (Boedeker) Y.Ito | <i>G. calochlorum</i> (Boedeker) Y.Ito | |
| <i>G. quehlianum</i> ssp. <i>leptanthum</i> v. <i>terweeaneanum</i> (Teuq ex Duursma) H.Till & Amerhauser | Mendoza- Argentina San Luis-Argentina | <i>G. terweeaneanum</i> (Teuq ex Duursma) Borgmann & Piltz | Names of Uncertain Application | |

literature

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A Red character : Text that should be noted, especially

A blue character : Text that should be noted.

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Table 3 ; Comparison between detailed classification of Genus Gymnocalycium by AGG and other rough classifications (About Capillensia, Parvula, Kieslingia Group(Aggregat))

| Classification of Genus Gymnocalycium by AGG and others | Habitat | Synonym (depends on AGG etc.) | Synonym of rough classification by Mr. Graham Charles | Rough classification and Synonym By Dr. D.Hunt, Dr. E.Anderson and Dr.R.Kiesling < [H] Hunt, [A] Anderson, [K] Kiesling > |
|---|---|---|--|---|
| I-c (H.Till) Series Quehliana-Aggregat Capillensia | | | Subgenus Gymnocalycium | G. capillense (Schick) Hosseus [H], [A], [K] |
| G. capillense (Schick) Hosseus | Cordoba- Argentina San Luis- Argentina | G. capillaense (Schick) Hosseus | G. capillaense (Schick) Hosseus | Synonym G. sigelianum (Schick) Hosseus [H], [A], [K] G. sutterianum (Schick) Hosseus [H], [A], [K] G. fischeri Halda, Kupcak, Lukasik & Sladovsky ? [H] G. deeszianum Dölz [K] |
| G. capillense v. mucidum (Oehme) H.Till | Cordoba- Argentina | G. mucidum Oehme sensu H.Till | G. capillaense (Schick) Hosseus Names of Uncertain Application for G. mucidum Oehme | G. deeszianum Dölz [A] |
| G. capillense v. sigelianum (Schick) H.Till | Cordoba- Argentina San Luis- Argentina | G. sigelianum (Schick) Hosseus | G. capillaense (Schick) Hosseus | G. stuckertii (Speg.) Britton & Rose [A], [K] Names of Uncertain Application <Graham Chares> |
| G. deeszianum Dölz | Cordoba- Argentina | G. capillense v. sigelianum f. deeszianum | G. capillaense (Schick) Hosseus | G. parvulum (Spegazzini) Spegazzini [A], [K] |
| G. fischeri Halda, Kupcak, Lukasik & Sladovsky | San Luis- Argentina | G. stuckertii (Speg.) Britton & Rose, p.p. G. miltii Halda, Kupcak, Lukasik & Sladovsky | G. fischeri Halda, Kupcak, Lukasik & Sladovsky | Synonym G. berctii Neuhuber [K] |
| G. fischeri ssp. suyuquense F.Berger | San Luis- Argentina | | G. fischeri Halda, Kupcak, Lukasik & Sladovsky | G. calochlorum (Boed.) Y.Ito [H], [A], [K] |
| G. miltii Halda, Kupcak, Lukasik & Sladovsky | San Luis- Argentina | G. fischeri Halda, Kupcak, Lukasik & Sladovsky | G. fischeri Halda, Kupcak, Lukasik & Sladovsky | Synonym G. calochlorum v. proliferum (Backeberg) Backeberg [H], [A], [K] G. proliferum (Backeberg) Backeberg [H], [A] G. papschii H.Till [H] |
| G. sutterianum (Schick) Hosseus | San Luis- Argentina Cordoba- Argentina | G. sunluiseense nom. nud. | G. capillaense (Schick) Hosseus | G. x heidiae Neuhuber [H] G. baldianum hybrid {G.rosae x G.}? [H] G. kieslingii Ferrari [H], [K], [A] |
| I-c (H.Till) Series Quehliana-Aggregat Parvula | | | Subgenus Gymnocalycium | |
| G. gertii Gapon & Schelkanova | Cordoba- Argentina | G. somii nom.nud. G. papschii H.Till p.p. | | G. x heidiae Neuhuber [H] |
| G. papschii H.Till | Cordoba- Argentina | | G. erinaceum J.G.Lambert | G. baldianum hybrid {G.rosae x G.}? [H] G. kieslingii Ferrari [H], [K], [A] |
| G. parvulum (Spegazzini) Spegazzini sensu Till | Cordoba- Argentina | G. calochlorum v. proliferum (Backeberg) Backeberg, p.p G. proliferum (Backeberg) Backeberg p.p | Names of Uncertain Application | G. kieslingii f. albiareolatum Ferrari [K] |
| G. parvulum ssp. amoenum (H.Till) F.Berger | Cordoba- Argentina | G. parvulum (Spegazzini) Spegazzini v. amoenum H.Till G. amoenum (H.Till) Lambert | G. calochlorum (Boedeker) Y.Ito | G. kieslingii f. castaneum Ferrari [K] |
| G. parvulum ssp. agnesiae F.Berger | Cordoba- Argentina | | | G. baldianum (Spegazzini) Spegazzini [H], [K], [A] |
| G. parvulum ssp. huettneri F.Berger | Cordoba- Argentina | | | Synonym G. baldianum v. albidiflorum Bercht [K] G. rosae H.Till [H] G. sanguiniflorum (Werdermann) Werdermann [K], [A] G. venturianum Fric ex Backeberg [K] |
| I-c (H.Till) Series Quehliana-Aggregat Kieslingia | | | Subgenus Gymnocalycium | |
| G. x heidiae Neuhuber | Catamarca- Argentina | G. baldianum (Spegazzini) Spegazzini, p.p. G. sanguiniflorum (Werdermann) Werdermann, p.p. G. venturianum Fric ex Backeberg, p.p. | G. baldianum (Spegazzini) Spegazzini, p.p. | |
| G. kieslingii Ferrari | La Rioja- Argentina | G. rosae H.Till s.l. G. baldianum v. albidiflorum Bercht | G. kieslingii Ferrari | |
| G. kieslingii f. albiareolatum Ferrari | La Rioja- Argentina | | G. kieslingii Ferrari | |
| G. kieslingii f. castaneum Ferrari | La Rioja- Argentina | | G. kieslingii Ferrari | |

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A Red character : Texa that should be noted, especially.

A blue character : Texa that should be noted.

This table is designed by Takashi Shimada

Table 4 ; Comparison between detailed classification of Genus *Gymnocalycium* by AGG and other rough classifications (About *Borthiana*, *Bertiana*, *Amerhauseriana* Group(Aggregat))

| Classification of Genus <i>Gymnocalycium</i> by AGG and others | Habitat | Synonym (depends on AGG etc.) | Synonym of rough classification by Mr. Graham Charles | Rough classification and Synonym By Dr. D.Hunt, Dr. E.Anderson and Dr.R.Kiesling < [H] Hunt, [A] Anderson, [K] Kiesling > |
|---|---|---|--|---|
| I-c (H.Till) Series Quehliana-Aggregat Borthiana | | | Subgenus <i>Gymnocalycium</i> | G. gibbosum (Havorth) Pfeiffer ex Mittler [H], [A], [K] |
| <i>G. borthii</i> <i>Koop ex H.Till</i> | San Luis-Argentina | | <i>G. gibbosum</i> ssp. <i>borthii</i> (<i>Koop ex H.Till</i>) <i>Chares</i> | Synonym G. gibbosum f. <i>ferox</i> (<i>Labouret</i>) <i>Slaba</i> nom. inval. [H] G. gibbosum v. <i>ferox</i> (<i>Labouret</i>) <i>Y.Ito</i> nom. inval. [H], [K] G. gibbosum v. <i>brachypetalum</i> (<i>Spegazzini</i>) <i>Papsch</i> [H], [A] G. gibbosum v. <i>celsianum</i> (<i>Labouret</i>) <i>Y.Ito</i> nom. inval. [K] G. gibbosum v. <i>fenellii</i> (<i>Haage ex Quehl</i>) <i>Y.Ito</i> nom. inval. [K] G. chubutense (<i>Spegazzini</i>) <i>Spegazzini</i> [A], [K] G. gibbosum ssp. <i>ferox</i> (<i>Labouret ex Rümpler</i>) <i>Papsch</i> [H], [A], [K] G. <i>reductum</i> (<i>Link</i>) <i>Pfeiffer ex Mittler</i> [A] G. gibbosum v. <i>gerardii</i> <i>Y.Ito</i> nom. inval. [A] G. <i>borthii</i> <i>Koop ex H.Till</i> [K] G. <i>strigianum</i> <i>Jeggle ex H.Till</i> [K] |
| <i>G. borthii</i> v. <i>viridis</i> <i>Neuhuber</i> | San Luis-Argentina | | <i>G. gibbosum</i> ssp. <i>borthii</i> (<i>Koop ex H.Till</i>) <i>Chares</i> | |
| <i>G. borthii</i> ssp. <i>kokori</i> <i>Haida & Milt</i> | San Luis-Argentina | | <i>G. gibbosum</i> ssp. <i>borthii</i> (<i>Koop ex H.Till</i>) <i>Chares</i> | |
| <i>G. borthii</i> ssp. <i>nogolense</i> <i>Neuhuber</i> | San Luis-Argentina | | <i>G. gibbosum</i> ssp. <i>borthii</i> (<i>Koop ex H.Till</i>) <i>Chares</i> | |
| <i>G. kroenleinii</i> <i>Kiesling</i> | La Rioja- Argentina | | <i>G. kroenleinii</i> <i>Kiesling</i> | |
| <i>G. strigianum</i> <i>Jeggle ex H.Till</i> | Mendoza-Argentina La Pampa-Argentina | | <i>G. strigianum</i> <i>Jeggle ex H.Till</i> | |
| <i>G. strigianum</i> ssp. <i>aeneum</i> <i>M.Meregalli & L.Guglemine</i> | San Luis-Argentina | | <i>G. strigianum</i> <i>Jeggle ex H.Till</i> | |
| <i>G. strigianum</i> ssp. <i>otmari</i> <i>Halda & Milt</i> | La Pampa-Argentina | | <i>G. strigianum</i> <i>Jeggle ex H.Till</i> | G. gibbosum ssp. <i>borthii</i> (<i>Koop ex H.Till</i>) <i>Chares</i> [H] |
| <i>G. tangaense</i> <i>Piltz</i> | Cordoba- Argentina | | <i>G. tangaense</i> <i>Piltz</i> | Synonym G. <i>borthii</i> <i>Koop ex H.Till</i> [H] |
| <i>G. tangaense</i> v. <i>lukasikii</i> (<i>Halda & Kupcak</i>) <i>Neuhuber</i> | San Luis- Argentina | <i>G. lukasikii</i> <i>Halda & Kupcak</i> | <i>G. tangaense</i> <i>Piltz</i> | G. borthii <i>Koop ex H.Till</i> [A] |
| <i>G. tangaense</i> v. <i>lukasiki</i> f. <i>emilii</i> (<i>Halda & Milt</i>) <i>H.Till</i> | San Luis-Argentina | <i>G. lukasiki</i> v. <i>emilii</i> <i>Halda & Milt</i> <i>G. berchtianum</i> nom. nud. | <i>G. tangaense</i> <i>Piltz</i> | G. kroenleinii <i>Kiesling</i> [H], [K] |
| <i>G. tangaense</i> ssp. <i>fuschilloi</i> <i>Neuhuber</i> | Cordoba- Argentina | | <i>G. tangaense</i> <i>Piltz</i> | G. strigianum <i>Jeggle ex H.Till</i> [H], [A] |
| I-c (H.Till) Series Quehliana-Aggregat Bertiana | | | Subgenus <i>Gymnocalycium</i> | G. tangaense <i>Piltz</i> [H], [A], [K] |
| <i>G. berchtii</i> <i>Neuhuber</i> | San Luis- Argentina | <i>G. parvulum</i> (<i>Spegazzini</i>) <i>Spegazzini</i> sensu <i>Kiesling</i> | <i>G. berchtii</i> <i>Neuhuber</i> | Synonym G. <i>gaponii</i> <i>Neuhuber</i> [H], [K] G. tangaense ssp. <i>fuschilloi</i> <i>Neuhuber</i> [K] |
| <i>G. nataliae</i> <i>Neuhuber</i> | San Luis- Argentina | <i>G. berchtii</i> <i>Neuhuber</i> s. lato | <i>G. berchtii</i> <i>Neuhuber</i> | G. berchtii <i>Neuhuber</i> [H], [A] |
| <i>G. morroense</i> <i>Kulhanek, Repka & J. Prochazka</i> | San Luis- Argentina | <i>G. nataliae</i> v. <i>morroense</i> nom. nud. <i>G. berchtianum</i> nom. nud. <i>G. berctii</i> ssp. <i>nataliae</i> v. <i>morroense</i> nom. nud. | <i>G. berchtii</i> <i>Neuhuber</i> | Synonym G. <i>terweemeanum</i> (<i>Teucq ex Duursma</i>) <i>Borgmann et Piltz</i> [H] G. <i>poeschlii</i> <i>Neuhuber</i> ? [H] G. <i>parvulum</i> (<i>Spegazzini</i>) <i>Spegazzini</i> sensu <i>Kiesling</i> [K] |
| <i>G. poeschlii</i> <i>Neuhuber</i> | San Luis- Argentina | | <i>G. fischeri</i> <i>Halda, Kupcak, Lukasik & Sladovsky</i> | G. parvulum (<i>Spegazzini</i>) <i>Spegazzini</i> [A], [K] |
| <i>G. poeschlii</i> ssp. <i>dotezalii</i> <i>Halda & Milt</i> | Cordoba-Argentina | <i>G. lepidum</i> nom. nud. | | Synonym G. <i>berctii</i> <i>Neuhuber</i> [K] |
| I-c (H.Till) Series Quehliana-Aggregat Amerhauseriana | | | Subgenus <i>Gymnocalycium</i> | G. amerhauseri <i>H.Till</i> [H], [K], [A] |
| <i>G. amerhauseri</i> <i>H.Till</i> | Cordoba-Argentina | | <i>G. amerhauseri</i> <i>H.Till</i> | G. erinaceum <i>Lambert</i> [H], [A], [K] |
| <i>G. amerhauseri</i> ssp. <i>altagraciens</i> <i>H.Till & Amerhauser</i> | Cordoba-Argentina | <i>G. altagraciense</i> <i>Bozsing ex Schütz</i> nom. nud. | <i>G. amerhauseri</i> <i>H.Till</i> | |
| <i>G. frankianum</i> <i>Raush ex H.Till & Amerhauser</i> | Catamarca-Argentina | | <i>G. kieslingii</i> <i>Ferrari</i> | |
| <i>G. gaponii</i> <i>Neuhuber</i> | Cordoba- Argentina | <i>G. genseri</i> nom. nud. | <i>G. erinaceum</i> <i>J.G. Lambert</i> | |
| <i>G. gaponii</i> ssp. <i>geyeri</i> <i>Neuhuber & Gapon</i> | Cordoba- Argentina | | <i>G. erinaceum</i> <i>J.G. Lambert</i> | |
| <i>G. walteri</i> <i>H.Till</i> | Cordoba- Argentina | | <i>G. amerhauseri</i> <i>H.Till</i> | |

literature

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A Red character : Texta that should be noted, especially
A blue character : Texta that should be noted.

This table is designed by Takashi Shimada

Table 5 ; Comparison between detailed classification of Genus Gymnocalycium by AGG and other rough classifications (About Mostiana, Hosseiana, Oenantha Group(Aggregat))

| Classification of Genus Gymnocalycium by AGG and others | Habitat | Synonym (depends on AGG etc.) | Synonym of rough classification by Mr. Graham Charles | Rough classification and Synonym By Dr. D.Hunt, Dr. E.Anderson and Dr.R.Kiesling < [H] Hunt, [A] Anderson, [K] Kiesling > |
|---|---|--|--|---|
| -A-AI-d (H.Till) Series Mostiana-Aggregat Mostiana | | | Subgenus Microsemineum | G. mostii (Gürke) Britton & Rose [H], [A], [K] |
| G. mostii (Gürke) Britton & Rose | Cordoba- Argentina | | G. mostii (Gürke) Britton & Rose | Synonym G. bicolor Schütz [A], [K] G. tobuschianum Schick [H] G. immemoratum Castellanos & Lelong [A], [K] G. kurtzianum (Gürke) Britton & Rose [H], [A], [K] G. mostii v. kurtzianum (Gürke) Backeberg [K] G. valnicekianum Jajo [A], [K] G. valnicekianum v. polycentralschütz [K] |
| G. mostii v. immemoratum (Castellanos & Lelong) H.Till & Amerhauser | Cordoba- Argentina | G. immemoratum Castellanos & Lelong G. valnicekianum v. polycentralschütz; G. froehlichianum sensu van Osten G. tobuschianum Schick (The first description belongs to G. monvillei) G. mostii v. immemoratum circulates by the name of G. valnicekianum. | G. mostii ssp. valnicekianum (Jajo) Meregali & Chares | G. valnicekianum Jajo [H] ? G. prochazkianum Sorma [H] To be evaluated [H] |
| G. mostii v. kurtzianum (Gürke) H.Till & Amerhauser | Cordoba- Argentina | G. mostii v. kurtzianum (Gürke) Backeberg G. kurtzianum (Gürke) Britton & Rose | G. mostii (Gürke) Britton & Rose | G. castellanosi ssp. ferocius (Till & Amerhauser) G. Charles [H] |
| G. mostii v. miradorensis H.Till & Amerhauser | Cordoba- Argentina | | G. mostii (Gürke) Britton & Rose | Synonym G. mostii ssp. ferocius (Backebg.) H.Till & Amerhauser [H] |
| G. mostii ssp. ferocius (Backebg.) H.Till & Amerhauser | Cordoba- Argentina La Rioja-Argentina | G. hybopleurum v. ferocius Backeberg nom. inval. G. hybopleurum v. ferox Backeberg nom. inval. | G. castellanosi ssp. ferocius (H.Till & Amerhauser) Chares | G. glaucum [H] G. glaucum ssp. ferrarii [H] G. mucidum Oehme sensu Piltz, Metzger & Schweitzer [A], [K] |
| G. valnicekianum Jajo | Cordoba- Argentina | G. gensei nom. nud. G. mostii v. stenocostatum nom. nud. G. mostii v. gensei nom. nud. G. curvispinum v. acuticostatum nom. nud., p.p. | G. mostii ssp. valnicekianum (Jajo) Meregali & Chares | Synonym G. ferrarii Rausch [A], [K] G. glaucum Ritter [A], [K] |
| G. valnicekianum v. bicolor (Schütz) H.Till & Amerhauser | Cordoba- Argentina | G. bicolor Schütz G. bicolor v. simplex nom. nud. G. curvispinum v. acuticostatum nom. nud., p.p. | G. mostii ssp. valnicekianum (Jajo) Meregali & Chares | G. hossei (F. Haage) A.W. Hill [H], [A] |
| G. valnicekianum ssp. prochazkianum (Sorma) H.Till & Amerhauser | Cordoba- Argentina | G. prochazkianum Sorma | G. mostii ssp. valnicekianum (Jajo) Meregali & Chares | Synonym G. mazanense (Backeberg) Backeberg [H], [A] G. nidulans Fric ex Backeberg [H], [A] G. weissianum Backeberg [H], [A] G. rhodanthemum (Boedker) Backeberg [A] G. guanchinense Schütz [A] |
| -A-AI-d (H.Till) Series Mostiana-Aggregat Hosseiana | | | Subgenus Microsemineum | G. mazanense (Backeberg) Backeberg [K] |
| G. ferrarii Rausch | La Rioja-Argentina Catamarca-Argentina | G. mucidum v. ferrarii | G. glaucum ssp. ferrarii (Rausch) Chares | Synonym G. mazanense v. breviflorum (Backeberg) Backeberg [K] G. mazanense v. ferox Backeberg nom. inval. [K] G. nidulans Fric ex Backeberg [K] G. weissianum Backeberg [K] G. weissianum v. atroseum Backeberg nom. inval. [K] G. weissianum v. cinerascens Backeberg nom. inval. [K] |
| G. ferrarii v. elegans Rausch & Kiesling nom. nud. | La Rioja-Argentina | | G. glaucum ssp. ferrarii (Rausch) Chares | G. hybopleurum (Schumann) Backeberg [A], [K] |
| G. hossei (F. Haage) A.W. Hill | La Rioja-Argentina | G. mazanense (Backeberg) Backeberg G. mazanense v. ferox Backeberg nom. inval. G. weissianum Backeberg G. azureum nom. nud. | G. hossei F. Haage | |
| G. hossei v. breviflorum (Backebg.) H.Till | La Rioja-Argentina | G. mazanense v. breviflorum (Backeberg) Backeberg | G. hossei F. Haage | |
| G. hossei v. nidulans (Backebg.) H.Till | La Rioja-Argentina | G. nidulans Fric ex Backeberg G. pugionacanthum Backeberg ex H.Till sensu Till G. demetianum nom. nud. G. hybopleurum v. euchlorum nom. nud., p.p. | G. hossei F. Haage | |
| -A-AI-d (H.Till) Series Mostiana-Aggregat Oenantha | | | Subgenus Microsemineum | Synonym The opinion of E. Anderson and R. Kiesling is different. G. nigriareolatum Backeberg [A] G. nigriareolatum v. densispinum Backeberg ex H.Till [A] G. nigriareolatum v. simoi H. Till [A] |
| G. ambatoense Piltz | Catamarca-Argentina | | G. oenanthemum Backeberg | G. ambatoense Piltz [K] G. castellanosi ssp. ferocius (Till & Amerhauser) G. Charles [K] G. catamarcense H.Till & W.Till, p.p [K] G. catamarcense ssp. acinacispinum H.Till & W.Till [K] G. catamarcense ssp. schmidianum H.Till & W.Till [K] G. hybopleurum v. breviflorum Backeberg nom. inval. [K] G. hybopleurum v. centrispinum Backeberg nom. inval. [K] G. hybopleurum v. euchlorum nom. nud. [K] G. hybopleurum v. ferox Backeberg nom. inval. [K] G. mostii ssp. ferocius (Backebg.) H.Till & Amerhauser [K] G. nigriareolatum Backeberg [K] |
| G. ambatoense ssp. plesniki Halda & Milt | Catamarca-Argentina | G. sp. LTR From Fecher | G. oenanthemum Backeberg | |
| G. nigriareolatum Backeberg | Catamarca-Argentina | G. curvispinum Fric. nom. nud. G. curvispinum v. porzeuello nom. nud. | G. nigriareolatum Backeberg | |
| G. nigriareolatum f. carmineum H.Till | Catamarca-Argentina | | G. nigriareolatum Backeberg | |
| G. nigriareolatum v. densispinum Backeberg ex H.Till | Catamarca-Argentina | G. hybopleurum v. centrispinum Backeberg nom. inval.? G. hybopleurum v. breviflorum Backeberg nom. inval.? | G. nigriareolatum Backeberg | |
| G. nigriareolatum v. simoi H.Till | Catamarca-Argentina | G. hybopleurum (Schumann) Backeberg, p.p | G. nigriareolatum Backeberg | |
| G. oenanthemum Backeberg | Catamarca-Argentina | G. carminanthum Borth et Koop, p.p. G. tillianum Rausch, p.p. G. nigriareolatum f. carmineum H.Till ? | G. oenanthemum Backeberg | |
| G. oenanthemum ssp. carminanthum (Borth & Koop) H.Till | Catamarca-Argentina | G. carminanthum Borth et Koop | G. oenanthemum Backeberg | |
| G. tillianum Rausch | Catamarca-Argentina | | G. oenanthemum Backeberg | G. nigriareolatum Backeberg [H] |
| G. tillianum ssp. montanum (Slaba) F. Berger | Catamarca-Argentina | G. carminanthum v. montanum Slaba | G. oenanthemum Backeberg | Synonym G. nigriareolatum v. densispinum Backeberg ex H.Till [H] G. nigriareolatum v. simoi H. Till [H] |
| G. curvispinum Fric. n. n. This is another Species of G. nigriareolatum By Mr. Neuhuber's personal opinion. | Catamarca-Argentina | G. nigriareolatum Backeberg | G. nigriareolatum Backeberg | G. ambatoense Piltz [A] G. carminanthum Borth et Koop [A] |
| G. nigriareolatum aff. The species that relates to G. nigriareolatum assumed to be G. hybopleurum in the east from Sierra del Manchao is an indetermination. (H.Till) | Catamarca-Argentina | G. hybopleurum (Schumann) Backeberg, p.p G. hybopleurum v. centrispinum Backeberg nom. inval. G. hybopleurum v. breviflorum Backeberg nom. inval. G. hybopleurum v. piraju nom. nud. G. hybopleurum v. euchlorum nom. nud., p.p. ? | G. nigriareolatum Backeberg | G. tillianum Rausch [A] G. oenanthemum Backeberg [H], [K] Synonym G. ambatoense Piltz [H] G. carminanthum Borth et Koop [H], [K] G. tillianum Rausch [H], [K] |

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Graham Charles Gymnocalycium In Habitat and Culture 2009

A Red character : Texta that should be noted, especially
A blue character : Texta that should be noted.

This table is designed by Takashi Shimada

Table 6 ; Comparison between detailed classification of Genus *Gymnocycium* by AGG and other rough classifications (About *Rhodanthera*, *Spegazianina* Group(Aggregat)

| Classification of Genus <i>Gymnocycium</i> by AGG and others | Habitat | Synonym (depends on AGG etc.) | Synonym of rough classification by Mr. Graham Charles | Rough classification and Synonym By Dr. D.Hunt, Dr. E.Anderson and Dr.R.Kiesling < [H] Hunt, [A] Anderson, [K] Kiesling > |
|--|---|--|---|--|
| -A-AI-d (H.Till) Series Mostiana-Aggregat <i>Rhodanthera</i> | | | | Subgenus <i>Microseminum</i> |
| <i>G. alboareolatum</i> Rausch | La Rioja-Argentina | <i>G. albiareolatum</i> Rausch | <i>G. albiareolatum</i> Rausch | <i>G. albiareolatum</i> Rausch [H], [A], [K] Synonym <i>G. albiareolatum</i> v. <i>ramosum</i> Rausch [K] |
| <i>G. alboareolatum</i> v. <i>ramosum</i> Rausch | La Rioja-Argentina | | <i>G. albiareolatum</i> Rausch | <i>G. rhodantherum</i> (Boedeker) Backeberg [H] Synonym <i>G. jochumii</i> Neuhuber [H] <i>G. guanchinense</i> Schütz [H] |
| <i>G. guanchinense</i> Schütz | La Rioja-Argentina | <i>G. famatimensis</i> Rausch nom. nud., p.p. | <i>G. rhodantherum</i> (Boedeker) Backeberg | <i>G. ritterianum</i> Rausch [H], [A], [K] G. hossei (F. Haage) A.W. Hill [H], [A] |
| <i>G. jochumii</i> Neuhuber | La Rioja-Argentina | | <i>G. ritterianum</i> Rausch | Synonym <i>G. mazanense</i> (Backeberg) Backeberg [H], [A] <i>G. nidulans</i> Fric ex Backeberg [H], [A] <i>G. weissianum</i> Backeberg [H], [A] <i>G. rhodantherum</i> (Boedeker) Backeberg [A] <i>G. guanchinense</i> Schütz [A] |
| <i>G. jochumii</i> v. <i>jugum</i> Neuhuber | La Rioja-Argentina | | <i>G. ritterianum</i> Rausch | Synonym <i>G. mazanense</i> v. <i>breviflorum</i> (Backeberg) Backeberg [K] <i>G. mazanense</i> v. <i>ferox</i> Backeberg nom. inval. [K] <i>G. nidulans</i> Fric ex Backeberg [K] <i>G. weissianum</i> Backeberg [K] |
| <i>G. rhodantherum</i> (Boedeker) H.Till | La Rioja-Argentina | <i>G. mazanense</i> v. <i>rhodantherum</i> (Boedeker) Backeberg nom. illeg. <i>G. famatimensis</i> Rausch nom. nud., p.p. | <i>G. rhodantherum</i> (Boedeker) Backeberg | <i>G. weissianum</i> v. <i>atroroseum</i> Backeberg nom. inval. [K] <i>G. weissianum</i> v. <i>cinerascens</i> Backeberg nom. inval. [K] |
| <i>G. rhodantherum</i> v. <i>cinerascens</i> H.Till | La Rioja-Argentina | <i>G. weissianum</i> v. <i>cinerascens</i> Backeberg nom. inval. | <i>G. rhodantherum</i> (Boedeker) Backeberg | G. bayrianum H.Till & H.Till [H], [A], [K] Synonym <i>G. spegazzinii</i> Britton & Rose [H], [A], [K] |
| <i>G. ritterianum</i> Rausch | La Rioja-Argentina | <i>G. famatimensis</i> Rausch nom., nud. p.p. | <i>G. ritterianum</i> Rausch | <i>G. spegazzinii</i> v. <i>major</i> Backeberg [K] <i>G. spegazzinii</i> v. <i>punillense</i> H.Till & W.Till [K] |
| <i>G. ritterianum</i> ssp. <i>acentracanthum</i> F. Berger | La Rioja-Argentina | | <i>G. ritterianum</i> Rausch | G. spegazzinii ssp. <i>cardenasianum</i> (Ritter) Kiesling & Metzger [H], [A] Synonym <i>G. armatum</i> Ritter [H], [A] |
| <i>G. weissianum</i> Backeberg | La Rioja-Argentina | <i>G. polycephalum</i> Piltz nom. nud. <i>G. mazanense</i> v. <i>polycephalum</i> Piltz nom. nud. | <i>G. hossei</i> F. Haage | G. glaucum [H] G. glaucum ssp. <i>ferrarii</i> [H] G. mucidum Oehme sensu Piltz, Metzger & Schweitzer [A], [K] |
| <i>G. weissianum</i> v. <i>atroroseum</i> Backeberg | La Rioja-Argentina | <i>G. mazanense</i> v. <i>roseiflorum</i> (Backeberg) H.Till nom. inval. | | Synonym <i>G. ferrarii</i> Rausch [A], [K] <i>G. glaucum</i> Ritter [A], [K] |
| -A-AI-d (H.Till) Series Mostiana-Aggregat <i>Spegazianina</i> | | | | Subgenus <i>Microseminum</i> |
| <i>G. bayrianum</i> H.Till ex H.Till | Salta- Argentina Tucuman-Argentina Catamarca- Argentina | <i>G. spegazzinii</i> ssp. <i>bayrianum</i> (H.Till) Halda <i>G. spegazzinii</i> v. <i>bayrianum</i> (H.Till) Halda | <i>G. bayrianum</i> H.Till | G. pugionacanthum Backeberg G. glaucum [H] G. glaucum ssp. <i>ferrarii</i> [H] G. mucidum Oehme sensu Piltz, Metzger & Schweitzer [A], [K] |
| <i>G. cardenasianum</i> Ritter | Tarija- Bolivia | <i>G. spegazzinii</i> ssp. <i>cardenasianum</i> (Ritter) Kiesling & Metzger | <i>G. cardenasianum</i> Ritter | Synonym <i>G. ferrarii</i> Rausch [A], [K] <i>G. glaucum</i> Ritter [A], [K] |
| <i>G. cardenasianum</i> ssp. <i>armatum</i> (Ritter) H.Till ined. | Tarija- Bolivia | <i>G. armatum</i> Ritter <i>G. cardenasianum</i> v. <i>armatum</i> (Ritter) Slaba et Sorma | <i>G. cardenasianum</i> Ritter | G. hybopleurum (Schumann) Backeberg [A], [K] Synonym The opinion of E. Anderson and R. Kiesling is different. <i>G. nigriareolatum</i> Backeberg [A] <i>G. nigriareolatum</i> v. <i>densispinum</i> Backeberg ex H.Till [A] <i>G. nigriareolatum</i> v. <i>simoi</i> H. Till [A] |
| <i>G. catamarcense</i> H.Till & W.Till | Catamarca- Argentina | <i>G. hybopleurum</i> (Schumann) Backeberg , p.p <i>G. pugionacanthum</i> Backeberg , p.p | <i>G. pugionacanthum</i> Backeberg | G. pugionacanthum Backeberg [H], [K] |
| <i>G. catamarcense</i> f. <i>belense</i> H.Till & W.Till | Catamarca- Argentina | | <i>G. pugionacanthum</i> Backeberg | G. pugionacanthum Backeberg [H], [K] |
| <i>G. catamarcense</i> f. <i>ensispinum</i> H.Till & W.Till | Catamarca- Argentina | | <i>G. pugionacanthum</i> Backeberg | G. pugionacanthum Backeberg [H], [K] |
| <i>G. catamarcense</i> f. <i>montanum</i> H.Till & W.Till | Catamarca- Argentina | | <i>G. pugionacanthum</i> Backeberg | G. pugionacanthum Backeberg [H], [K] |
| <i>G. catamarcense</i> ssp. <i>acinacispinum</i> H.Till & W.Till | Catamarca- Argentina | | <i>G. pugionacanthum</i> Backeberg | G. pugionacanthum Backeberg [H], [K] |
| <i>G. catamarcense</i> ssp. <i>schmidianum</i> H.Till & W.Till | Catamarca- Argentina | <i>G. glaucum</i> F.Ritter ssp. <i>albertovitchii</i> J. Halda & I. Milt | <i>G. pugionacanthum</i> Backeberg | G. pugionacanthum Backeberg [H], [K] |
| <i>G. glaucum</i> Ritter | La Rioja-Argentina | <i>G. mucidum</i> Oehme sensu Piltz, Metzger & Schweitzer | <i>G. glaucum</i> F.Ritter | G. pugionacanthum Backeberg [H], [K] |
| <i>G. spegazzinii</i> Britton & Rose | Salta- Argentina Tucuman-Argentina Catamarca- Argentina | <i>G. loricatum</i> (Speg.) Speg. nom. illeg. | <i>G. spegazzinii</i> Britton & Rose | G. pugionacanthum Backeberg [H], [K] |
| <i>G. spegazzinii</i> ssp. <i>sarckae</i> Halda & Milt | Salta- Argentina | <i>G. spegazzinii</i> Britton & Rose | <i>G. spegazzinii</i> Britton & Rose | G. pugionacanthum Backeberg [H], [K] |
| <i>G. spegazzinii</i> f. <i>unguispinum</i> Slaba | Salta- Argentina | <i>G. spegazzinii</i> Britton & Rose | <i>G. spegazzinii</i> Britton & Rose | G. pugionacanthum Backeberg [H], [K] |
| <i>G. spegazzinii</i> v. <i>horizontalonium</i> (Fric) Valnicek | Salta- Argentina | <i>G. spegazzinii</i> Britton & Rose | <i>G. spegazzinii</i> Britton & Rose | G. pugionacanthum Backeberg [H], [K] |
| <i>G. spegazzinii</i> v. <i>major</i> Backeberg | Salta- Argentina | <i>G. spegazzinii</i> v. <i>cachense</i> Backeberg & Knuth nom. inval. | <i>G. spegazzinii</i> Britton & Rose | G. pugionacanthum Backeberg [H], [K] |
| <i>G. spegazzinii</i> v. <i>punillense</i> H.Till & W.Till | Salta- Argentina Tucuman-Argentina | | <i>G. spegazzinii</i> Britton & Rose | G. pugionacanthum Backeberg [H], [K] |
| | | | | Formerly regarded as a form of the uncertain <i>G. hybopleurum</i> but now thought to be an old name for <i>G. catamarcense</i> - Hum (The New Cactus Lexicon) Synonym <i>G. catamarcense</i> H.Till & W.Till [H] <i>G. catamarcense</i> H.Till & W.Till, p.p [K] <i>G. catamarcense</i> f. <i>belense</i> H.Till & W.Till [H], [K] <i>G. catamarcense</i> f. <i>ensispinum</i> H.Till & W.Till [H], [K] <i>G. catamarcense</i> f. <i>montanum</i> H.Till & W.Till [H], [K] <i>G. hybopleurum</i> (Schumann) Backeberg [H] |
| | | | | G. pugionacanthum Backeberg ex H.Till (sensu Till) [A] G. catamarcense ssp. <i>catamarcense</i> H.Till & W.Till [A] G. catamarcense ssp. <i>acinacispinum</i> H.Till & W.Till [A] G. catamarcense ssp. <i>schmidianum</i> H.Till & W.Till [A] |
| | | | | < <i>G. rhodantherum</i> (Boedeker) Backeberg ; Doubtful Taxon [K] > < <i>G. guanchinense</i> Schütz ; Doubtful Taxon [K] > |

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Graham Charles *Gymnocycium* In Habitat and Culture 2006

A Red character : Texta that should be noted, especially.
A blue character : Texta that should be noted.

This table is designed by Takashi Shimada

Table 7 ; Comparison between detailed classification of Genus *Gymnocalycium* by AGG and other rough classifications (About *Monvilleana*, *Saglionia* Group(Aggregat))

| Classification of Genus <i>Gymnocalycium</i> by AGG and others | Habitat | Synonym (depends on AGG etc.) | Synonym of rough classification by Mr. Graham Charles | Rough classification and Synonym By Dr. D.Hunt, Dr. E.Anderson and Dr.R.Kiesling < [H] Hunt, [A] Anderson, [K] Kiesling > |
|--|--|--|---|--|
| -A-A1-e (H.Till) Series <i>Saglioniana</i>-Aggregat <i>Monvilleana</i> | | | Subgenus <i>Microsemineum</i> | <i>G. monvillei</i> (Lemaire) Britton & Rose [H], [A], [K] |
| <i>G. brachyanthum</i> (Gürke) Britton & Rose | Cordoba-Argentina | <i>G. monvillei</i> v. <i>grandiflorum</i> (Backeberg) H.Till <i>G. grandiflorum</i> Backeberg <i>G. monvillei</i> (Lemaire) Pfeiff ex Britton & Rose | <i>G. monvillei</i> (Lemaire) Britton & Rose | Synonym <i>G. brachyanthum</i> (Gürke) Britton & Rose [K] <i>G. monvillei</i> v. <i>grandiflorum</i> (Backeberg) H.Till [K] <i>G. monvillei</i> ssp. <i>brachyanthum</i> (Gürke) H.Till [H], [K] <i>G. monvillei</i> ssp. <i>gertrudae</i> (Neuhuber) Neuhuber [H] <i>G. multiflorum</i> (Hooker) Britton & Rose [H], [A], [K] <i>G. multiflorum</i> v. <i>albispinum</i> (K.Schumann) Backeberg [K] <i>G. multiflorum</i> v. <i>parisiense</i> (K.Schumann) Backeberg [K] <i>G. schuetzianum</i> H.Till & Schatzl [H], [K] |
| <i>G. monvillei</i> (Lemaire) Pfeiff ex Britton & Rose | Cordoba-Argentina | <i>G. multiflorum</i> (Hooker) Britton & Rose | <i>G. monvillei</i> (Lemaire) Britton & Rose | |
| <i>G. monvillei</i> v. <i>coloratum</i> Neuhuber | Cordoba-Argentina | | <i>G. monvillei</i> (Lemaire) Britton & Rose | |
| <i>G. monvillei</i> v. <i>safronovii</i> Gapon | Cordoba-Argentina | | <i>G. monvillei</i> (Lemaire) Britton & Rose | |
| <i>G. monvillei</i> v. <i>steinerii</i> (Backeberg) H.Till | Cordoba-Argentina | | <i>G. monvillei</i> (Lemaire) Britton & Rose | |
| <i>G. monvillei</i> ssp. <i>achirasense</i> (H.Till & Schatzl) ex H.Till H.Till | San Luis-Argentina | <i>G. achirasense</i> H.Till & Schatzl ex H.Till <i>G. horridispinum</i> v. <i>achirasense</i> (Till & Schatzl) Lodé | <i>G. horridispinum</i> ssp. <i>achirasense</i> (Till & Schatzl) ex Till Chares | |
| <i>G. monvillei</i> ssp. <i>achirasense</i> f. <i>villmercedense</i> H.Till & Neuhuber | San Luis-Argentina | | <i>G. horridispinum</i> ssp. <i>achirasense</i> (Till & Schatzl) ex Till Chares | <i>G. monvillei</i> ssp. <i>brachyanthum</i> (Gürke) H.Till [A] |
| <i>G. monvillei</i> ssp. <i>achirasense</i> v. <i>chacarasense</i> Neuhuber | San Luis-Argentina | | <i>G. horridispinum</i> ssp. <i>achirasense</i> (Till & Schatzl) ex Till Chares | Synonym |
| <i>G. monvillei</i> ssp. <i>achirasense</i> v. <i>echinatum</i> Neuhuber | San Luis-Argentina | | <i>G. horridispinum</i> ssp. <i>achirasense</i> (Till & Schatzl) ex Till Chares | <i>G. schuetzianum</i> H.Till & Schatzl [A] |
| <i>G. monvillei</i> ssp. <i>achirasense</i> v. <i>kainradiae</i> Neuhuber | San Luis-Argentina | | <i>G. horridispinum</i> ssp. <i>achirasense</i> (Till & Schatzl) ex Till Chares | <i>G. ourselianum</i> (Cels ex Salm-Dyck) Y.Ito nom. inval. [A] |
| <i>G. monvillei</i> ssp. <i>achirasense</i> v. <i>orientale</i> Neuhuber | Cordoba-Argentina | | <i>G. horridispinum</i> ssp. <i>achirasense</i> (Till & Schatzl) ex Till Chares | <i>G. monvillei</i> ssp. <i>achirasense</i> (H.Till & Schatzl) ex H.Till H.Till [H], [A], [K] |
| <i>G. monvillei</i> ssp. <i>gertrudae</i> (Neuhuber) Neuhuber | San Luis-Argentina | <i>G. monvillei</i> ssp. <i>brachyanthum</i> v. <i>gertrudae</i> Neuhuber | <i>G. monvillei</i> (Lemaire) Britton & Rose | Synonym |
| <i>G. monvillei</i> ssp. <i>gertrudae</i> v. <i>confusa</i> Neuhuber | San Luis-Argentina | <i>G. monvillei</i> ssp. <i>brachyanthum</i> (Gürke) H.Till sensu H.Till & Neuhuber | <i>G. monvillei</i> (Lemaire) Britton & Rose | <i>G. achirasense</i> H.Till & Schatzl ex H.Till [H] [A], [K] <i>G. horridispinum</i> var. <i>achirasense</i> (Till & Schatzl) Lodé [K] |
| <i>G. monvillei</i> ssp. <i>horridispinum</i> (Frank ex H.Till) H.Till | Cordoba-Argentina San Luis-Argentina | | <i>G. horridispinum</i> Frank ex Till | <i>G. monvillei</i> ssp. <i>horridispinum</i> (Frank ex H.Till) H.Till [H], [A], [K] |
| <i>G. schuetzianum</i> H.Till & Schatzl | Cordoba-Argentina | <i>G. monvillei</i> ssp. <i>schuetzianum</i> Neuhuber & H.Till | <i>G. monvillei</i> (Lemaire) Britton & Rose | Synonym <i>G. horridispinum</i> Frank ex H.Till [H], [A], [K] |
| -A-A1-e (H.Till) Series <i>Saglioniana</i> Aggregat-<i>Saglionia</i> | | | Subgenus <i>Microsemineum</i> | <i>G. saglionis</i> (Cels) Britton & Rose [H], [A], [K] |
| <i>G. pflanzii</i> (Vaupel) Werdermann | Santa Cruz-Bolivia Chuquisaca-Bolivia Tarija-Bolivia Cordillera-Bolivia Tucuman-Argentina | <i>G. marquezii</i> M.Cardenas | <i>G. pflanzii</i> (Vaupel) Werdermann | Synonym <i>G. tilcarensis</i> (Backeberg) Schütz [H] <i>G. saglionis</i> v. <i>jujuysense</i> Backeberg [K] |
| <i>G. pflanzii</i> v. <i>paraguayense</i> H.Till & Amerhauser | Nueva Asuncion-Paraguay | | <i>G. pflanzii</i> (Vaupel) Werdermann | Synonym |
| <i>G. pflanzii</i> v. <i>lagunillasense</i> (M.Cardenas) Donald | Cordillera-Bolivia Tarija-Bolivia | <i>G. lagunillasense</i> M.Cardenas <i>G. chuquisacacum</i> M.Cardenas <i>G. izozogii</i> M.Cardenas <i>G. pflanzii</i> v. <i>izozogii</i> f. <i>izozogii</i> (M.Cardenas) Donald <i>G. pflanzii</i> v. <i>izozogii</i> f. <i>chuquisacacum</i> (M.Cardenas) Donald | <i>G. pflanzii</i> (Vaupel) Werdermann | <i>G. tilcarensis</i> (Backeberg) Schütz [K] <i>G. saglionis</i> v. <i>tilcarensis</i> Backeberg nom. inval. [K] <i>G. saglionis</i> ssp. <i>tilcarensis</i> (Backeberg) Till & W.Till [K] <i>G. saglionis</i> ssp. <i>tilcarensis</i> (Backeberg) Till & W.Till [A] |
| <i>G. pflanzii</i> ssp. <i>argentinense</i> H.Till & W.Till | Salta-Argentina Tucuman-Argentina Catamarca-Argentina | | <i>G. pflanzii</i> ssp. <i>argentinense</i> Till & W. Till | <i>G. pflanzii</i> (Vaupel) Werdermann [H], [A] |
| <i>G. pflanzii</i> ssp. <i>dorisiae</i> Amerhauser | Tarija-Bolivia | | <i>G. pflanzii</i> (Vaupel) Werdermann | Synonym <i>G. chuquisacacum</i> M.Cardenas [H], [A] <i>G. izozogii</i> M.Cardenas [H], [A] <i>G. lagunillasense</i> M.Cardenas [H], [A] <i>G. marquezii</i> M.Cardenas [H], [A] <i>G. pflanzii</i> v. <i>lagunillasense</i> (M.Cardenas) Donald [A] <i>G. comarapense</i> M.Cardenas ex Backeb. [A] <i>G. millaresii</i> M.Cardenas [H], [A] <i>G. riogradense</i> M.Cardenas [A] <i>G. pflanzii</i> v. <i>albigulupa</i> F.Ritter [A] <i>G. pflanzii</i> v. <i>albigulupa</i> (M.Cardenas) Donald [A] <i>G. zegarrae</i> M.Cardenas [A] |
| <i>G. saglionis</i> (Cels) Britton & Rose | Jujuy-Argentina Tucuman-Argentina Salta-Argentina Catamarca-Argentina La Rioja-Argentina San Juan-Argentina | <i>G. saglionis</i> v. <i>albispinum</i> Ritter ex Backeberg nom.nud. <i>G. saglionis</i> v. <i>flaviispinum</i> Ritter ex Backeberg nom.nud. <i>G. saglionis</i> v. <i>longispinum</i> Fric nom.nud. <i>G. saglionis</i> v. <i>roseispinum</i> Ritter ex Backeberg nom.nud. <i>G. saglionis</i> v. <i>rubispinum</i> Backeberg nom.nud. <i>G. saglionis</i> v. <i>tucumanense</i> hort. nom.nud. | <i>G. saglionis</i> (Cels) Britton & Rose | <i>G. pflanzii</i> ssp. <i>argentinense</i> Till & W. Till [H], [A], [K] |
| <i>G. saglionis</i> fa. <i>splendens</i> nom. nud. | La Rioja-Argentina | | <i>G. saglionis</i> (Cels) Britton & Rose | Synonym <i>G. marquezii</i> v. <i>argentinense</i> Backeberg nom. inval. [K] <i>G. pflanzii</i> ssp. <i>dorisiae</i> Amerhauser [A] |
| <i>G. saglionis</i> ssp. <i>tilcarensis</i> (Backeberg) H.Till & W.Till | Jujuy-Argentina | <i>Brachycalycium</i> <i>tilcarensis</i> Backeberg <i>G. tilcarensis</i> (Backeberg) Schütz <i>G. saglionis</i> v. <i>jujuysense</i> Backeberg <i>G. saglionis</i> v. <i>tilcarensis</i> Backeberg nom. inval. | <i>G. saglionis</i> (Cels) Britton & Rose | |
| <i>G. zegarrae</i> M.Cardenas | Santa Cruz-Bolivia Chuquisaca-Bolivia | <i>G. comarapense</i> M.Cardenas ex Backeb. nom.inval. <i>G. pflanzii</i> v. <i>albigulupa</i> Ritter <i>G. pflanzii</i> v. <i>zegarrae</i> (M.Cardenas) Donald <i>G. saglionis</i> v. <i>bolivianum</i> M.Cardenas nom. nud. | <i>G. pflanzii</i> ssp. <i>zegarrae</i> (M.Cardenas) Chares | Synonym <i>G. marquezii</i> v. <i>argentinense</i> Backeberg nom. inval. [K] <i>G. pflanzii</i> ssp. <i>dorisiae</i> Amerhauser [A] |
| <i>G. zegarrae</i> v. <i>riogradense</i> (M.Cardenas) H.Till & Amerhauser | Santa Cruz-Bolivia Chuquisaca-Bolivia | <i>G. pflanzii</i> v. <i>riogradense</i> (M.Cardenas) Donald <i>G. riogradense</i> M.Cardenas | <i>G. pflanzii</i> ssp. <i>zegarrae</i> (M.Cardenas) Chares | <i>G. pflanzii</i> ssp. <i>zegarrae</i> M.Cardenas [H] |
| <i>G. zegarrae</i> ssp. <i>millaresii</i> (M.Cardenas) H.Till & W.Till | Potosí-Bolivia | <i>G. millaresii</i> M.Cardenas <i>G. pflanzii</i> v. <i>millaresii</i> (M.Cardenas) Donald <i>G. surense</i> nom. nud. Richard <i>G. tominense</i> nom nud. Richard <i>G. mistiensis</i> nom. nud. | <i>G. pflanzii</i> ssp. <i>zegarrae</i> (M.Cardenas) Chares | Synonym <i>G. zegarrae</i> M.Cardenas [H] |

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A Red character : Texta that should be noted, especially.
A blue character : Texta that should be noted.

This table is designed by Takashi Shimada

Table 8 ; Comparison between detailed classification of Genus Gymnocalycium by AGG and other rough classifications (About Chiquitana, Chacoensia, Castellanosiana Group(Aggregat))

| Classification of Genus Gymnocalycium by AGG and others | Habitat | Synonym (depends on AGG etc.) | Synonym of rough classification by Mr. Graham Charles | Rough classification and Synonym By Dr. D.Hunt, Dr. E.Anderson and Dr.R.Kiesling < [H] Hunt, [A] Anderson, [K] Kiesling > |
|--|--|--|---|---|
| -A-A1-f (H.Till) Series Chiquitanae-Aggregat Chiquitana | | | Subgenus Microsemineum | G. chiquitanum Cardenas [H], [A] |
| <i>G. chiquitanum</i> Cardenas | Santa Cruz-Bolivia | <i>G. hammerschmidii</i> Backeberg nom. inval. | <i>G. chiquitanum</i> Cardenas | Synonym <i>G. hammerschmidii</i> Backeberg nom. inval. [H] |
| <i>G. chiquitanum</i> v. <i>hammerschmidii</i> (Backeb.) H.Till | Santa Cruz-Bolivia | <i>G. chiquitanum</i> Cardenas | <i>G. chiquitanum</i> Cardenas | <i>G. chacoense</i> Amerhauser [H] (not justified) <i>G. paediophilum</i> Ritter ex Schütz [H] (not justified) |
| <i>G. paediophilum</i> Ritter ex Schütz | Boqueron-Paraguay | <i>G. paediophyllum</i> Schütz | <i>G. paediophilum</i> Ritter ex Schütz | G. paediophyllum Schütz [A] |
| -A-A1-g (H.Till) Series Chacoensiana Aggregat-Chacoensia | | | Subgenus Microsemineum | G. castellanosii Backeberg [H], [A], [K] |
| <i>G. chacoense</i> Amerhauser | Santa Cruz-Bolivia | | <i>G. chacoense</i> Amerhauser | Synonym <i>G. acorugatum</i> Lambert [A] <i>G. bozsonianum</i> Schütz [A] <i>G. ferox</i> (Backeberg) Slaba nom. inval. [A] |
| -A-A4 (H.Till) Subsectio Castellanosiana Aggregat-Castellanosiana | | | Subgenus Microsemineum | G. castellanosii v. bozsonianum (Schütz) Piltz [K] |
| <i>G. acorugatum</i> Lambert | San Juan-Argentina | | <i>G. rhodanthemum</i> (Boedeker) Backeberg | Synonym <i>G. bozsonianum</i> Schütz [K] |
| <i>G. castellanosii</i> Backeberg | La Rioja-Argentina San Juan-Argentina | | <i>G. castellanosii</i> Backeberg | G. castellanosii ssp. acorugatum (Lambert) Kiesling & Merzing [H], [K] |
| <i>G. castellanosii</i> v. <i>rigidum</i> H.Till | La Rioja-Argentina | | <i>G. castellanosii</i> Backeberg | Synonym <i>G. acorugatum</i> Lambert [H], [K] |
| <i>G. castellanosii</i> ssp. <i>bozsonianum</i> (Schutz) Amerhauser & H.Till | La Rioja-Argentina San Juan-Argentina | <i>G. castellanosii</i> v. <i>bozsonianum</i> (Schütz) Piltz <i>G. bozsonianum</i> Schütz | <i>G. castellanosii</i> Backeberg | G. castellanosii ssp. ferocior (Till & Amerhauser) G. Charles [H] |
| <i>G. castellanosii</i> ssp. <i>bozsonianum</i> v. <i>armillatum</i> Piltz | La Rioja-Argentina | <i>G. castellanosii</i> v. <i>armillatum</i> Piltz | <i>G. castellanosii</i> Backeberg | Synonym <i>G. mostii</i> ssp. <i>ferocior</i> (Backeb.) H.Till & Amerhauser [H] |
| <i>G. coloradense</i> F. Berger | La Rioja-Argentina | <i>G. hossei</i> v. <i>longispinum</i> nom. nud. <i>G. hossei</i> v. <i>ferox</i> nom. nud. <i>G. sp</i> Sierra de los Colorados | <i>G. rhodanthemum</i> (Boedeker) Backeberg | |

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A Red character : Texa that should be noted, especially.
A blue character : Texa that should be noted.

This table is designed by Takashi Shimada

Table 9 : Comparison between detailed classification of Genus Gymnocalycium by AGG and other rough classifications (About Uruguayensia, Multiflora, Horstiana Group(Aggregat))

| Classification of Genus Gymnocalycium by AGG and others | Habitat | Synonym (depends on AGG etc.) | Synonym of rough classification by Mr. Graham Charles | Rough classification and Synonym By Dr. D.Hunt, Dr. E.Anderson and Dr.R.Kiesling < [H] Hunt, [A] Anderson, [K] Kiesling > |
|--|--|---|---|---|
| -A-A2 (H.Till) Series Macrosemineum-Aggregat Uruguayensia | | | | |
| G. artigas Herter | Artigas-Uruguay Rio Grande do Sul-Brazil | G. uruguayense (Arechavaleta) Britton & Rose | Subgenus Macrosemineum G. hyptiacanthum ssp. uruguayense (Monville ex Labouret) Merregalli | G. denudatum (Link & Otto) Pfeiffer ex Mittler [H], [A], [K] Synonym G. megalothelos (Sencke ex K.Schumann) Britton & Rose ; A name of doubtful application best rejected [H] |
| G. denudatum (Link & Otto) Pfeiffer ex Mittler | Rio Grande de Sul-Brazil | G. denudatum v. octogonum (K.Schum.) Y.Ito nom. inval. G. denudatum v. durispinum nom. nud. G. denudatum v. grandiflorum nom. nud. G. denudatum v. multiflorum nom. nud. G. denudatum v. nigripinum nom. nud. G. denudatum v. boliviensis nom. nud. G. denudatum v. flavispinum (Schelle) Y.Ito nom. inval. G. denudatum v. backebergii Pazout nom. inval. G. denudatum v. argentinense F. Haage? | G. denudatum (Link & Otto) Pfeiffer ex Mittler | G. angelae Merregalli [K], [A] G. rauschii H.Till & W.Till [A] Doubtful Taxon [K] G. netrelianium (Monville ex Labouret) Britton & Rose [A] Doubtful Taxon [K] G. uruguayense (Arechavaleta) Britton & Rose [H], [A], [K] Synonym G. artigas Herter [A], [K] G. guerkeanum (Haage) Britton & Rose [H], [A], [K] G. melanocharpum (Arechavaleta) Britton & Rose [H], [A] G. netrelianium (Monville ex Labouret) Britton & Rose [H] G. rauschii H.Till & W.Till [H] |
| G. denudatum v. roseiflorum (Hildmann) Borg | Rio Grande de Sul-Brazil | G. denudatum v. roseiflorum (K.Schum.) Y.Ito nom. inval. | G. denudatum (Link & Otto) Pfeiffer ex Mittler | Synonym G. artigas Herter [A], [K] G. guerkeanum (Haage) Britton & Rose [H], [A], [K] G. melanocharpum (Arechavaleta) Britton & Rose [H], [A] G. netrelianium (Monville ex Labouret) Britton & Rose [H] G. rauschii H.Till & W.Till [H] |
| G. denudatum ssp. angelae (Merregalli) Prestle | Corrientes-Argentina | G. angelae Merregalli | G. angelae Merregalli | G. netrelianium (Monville ex Labouret) Britton & Rose [A] Doubtful Taxon [K] G. uruguayense (Arechavaleta) Britton & Rose [H], [A], [K] Synonym G. artigas Herter [A], [K] G. guerkeanum (Haage) Britton & Rose [H], [A], [K] G. melanocharpum (Arechavaleta) Britton & Rose [H], [A] G. netrelianium (Monville ex Labouret) Britton & Rose [H] G. rauschii H.Till & W.Till [H] |
| G. denudatum ssp. angulatum Prestle | Rio Grande de Sul-Brazil | | G. denudatum (Link & Otto) Pfeiffer ex Mittler | G. netrelianium (Monville ex Labouret) Britton & Rose [H], [A], [K] Synonym G. artigas Herter [A], [K] G. guerkeanum (Haage) Britton & Rose [H], [A], [K] G. melanocharpum (Arechavaleta) Britton & Rose [H], [A] G. netrelianium (Monville ex Labouret) Britton & Rose [H] G. rauschii H.Till & W.Till [H] |
| G. denudatum ssp. necopinum Prestle | Rio Grande de Sul-Brazil | | G. denudatum (Link & Otto) Pfeiffer ex Mittler | G. netrelianium (Monville ex Labouret) Britton & Rose [H], [A], [K] Synonym G. artigas Herter [A], [K] G. guerkeanum (Haage) Britton & Rose [H], [A], [K] G. melanocharpum (Arechavaleta) Britton & Rose [H], [A] G. netrelianium (Monville ex Labouret) Britton & Rose [H] G. rauschii H.Till & W.Till [H] |
| G. guerkeanum (Haage) Britton & Rose | | | G. hyptiacanthum ssp. uruguayense (Monville ex Labouret) Merregalli | G. hyptiacanthum (Lem.) Britton & Rose sensu Backeberg [K], [A] G. hyptiacanthum ; Another untypifiable name of disputed application, best abandoned. The unsupported neotype proposed by Kiesling [H] |
| G. lecanum (Hooker) Britton & Rose sensu Backeberg | Candones-Uruguay Cerro Largo-Uruguay Florida-Uruguay Lavalleja-Uruguay Maldonado-Uruguay Treinta y Tres-Uruguay | Echinocactus lecanum Hooker sensu K.Schumann Echinocactus hyptiacanthus Lemaire sensu Schlosser & Schütz G. hyptiacanthum (Lem.) Britton & Rose G. uruguayense v. lecanum (Hooker) Prestle nom. nud. G. netrelianium (Monville ex Labouret) Britton & Rose, p.p. G. uruguayense (Arechavaleta) Britton & Rose, p.p. | G. hyptiacanthum (Lem.) Britton & Rose | G. lecanum (Hooker) Britton & Rose [A] G. lecanum (Hooker) Britton & Rose ; A plant (Series Gymnocalycium Aggregat Reducta) from Argentina and Synonym of G. reductum ssp. lecanum (Hooker) Papsh [H] Doubtful Taxon [K] |
| G. lecanum v. brevispinum Backeberg | | G. uruguayense (Arechavaleta) Britton & Rose | | G. lecanum (Hooker) Britton & Rose [A] G. lecanum (Hooker) Britton & Rose ; A plant (Series Gymnocalycium Aggregat Reducta) from Argentina and Synonym of G. reductum ssp. lecanum (Hooker) Papsh [H] Doubtful Taxon [K] |
| G. megalothelon (Sencke ex K.Schumann) Britton & Rose sensu Till | Rio Grande de Sul-Brazil | G. denudatum (Link & Otto) Pfeiffer s.l G. denudatum v. paraguayense F. Haage ex Y.Ito. nom. inval. | G. denudatum (Link & Otto) Pfeiffer ex Mittler | G. reductum ssp. lecanum (Hooker) Papsh [H] Synonym G. schatzianum Strigl & W.Till [H] G. megalothelon (Sencke ex K.Schumann) Britton & Rose [A] Synonym G. monvillei (Lemaire) Britton & Rose? [A] |
| G. megalothelon v. susannae H.Till | Artigas-Uruguay | | G. denudatum (Link & Otto) Pfeiffer ex Mittler | G. mesopotamicum Kiesling [H], [A], [K] Synonym G. angelae Merregalli [H] |
| G. megalothelon ssp. presleianum H.Till | Rio Grande de Sul-Brazil | G. neobuenekeri Prestle nom.nud. | G. denudatum (Link & Otto) Pfeiffer ex Mittler | G. monvillei (Lemaire) Britton & Rose [H], [A], [K] Synonym G. multiflorum (Hooker) Britton & Rose sensu Britton & Rose [H], [A], [K] G. multiflorum v. albispinum (K.Schum.) Backeberg [K] G. multiflorum v. parisense (K.Schum.) Backeberg [K] |
| G. melanocharpum (Arechavaleta) Britton & Rose | Paysandu-Uruguay Rio Negro-Uruguay | | G. hyptiacanthum ssp. uruguayense (Monville ex Labouret) Merregalli | Synonym G. monvillei (Lemaire) Britton & Rose? [A] |
| G. netrelianium (Monville ex Labouret) Britton & Rose | Cerro Largo-Uruguay Lavalleja-Uruguay Maldonado-Uruguay Treinta y Tres-Uruguay | G. lecanum v. netrelianium (Monville ex Weber) Backeberg G. lecanum (Hooker) Britton & Rose, p.p. sensu Backeberg G. uruguayense (Arechavaleta) Britton & Rose, p.p. | G. hyptiacanthum ssp. netrelianium (Arechavaleta) Merregalli | Synonym G. monvillei (Lemaire) Britton & Rose? [A] |
| G. rauschii H.Till & W.Till | Tacuarembó-Uruguay | | Names of Uncertain Application | G. mesopotamicum Kiesling [H], [A], [K] Synonym G. angelae Merregalli [H] |
| G. uruguayense (Arechavaleta) Britton & Rose | Artigas-Uruguay Lavalleja-Uruguay Rio Grande de Sul-Brazil Rivers-Uruguay Tacuarembó-Uruguay | G. artigas Herter G. guerkeanum (Haage) Britton & Rose G. lecanum v. brevispinum Backeberg G. hyptiacanthum (Lem.) Britton & Rose sensu Backeberg G. hyptiacanthum v. citriflorum Fric nom. nud. G. lecanum (Hooker) Britton & Rose sensu Backeberg G. netrelianium (Monville ex Labouret) Britton & Rose G. uruguayense f. depressum (Osten) Osten | G. hyptiacanthum ssp. uruguayense (Monville ex Labouret) Merregalli | G. monvillei (Lemaire) Britton & Rose [H], [A], [K] Synonym G. multiflorum (Hooker) Britton & Rose sensu Britton & Rose [H], [A], [K] G. multiflorum v. albispinum (K.Schum.) Backeberg [K] G. multiflorum v. parisense (K.Schum.) Backeberg [K] |
| G. uruguayense f. depressum (Osten) Osten | | Echinocactus uruguayensis f. depressa Osten | G. hyptiacanthum ssp. uruguayense (Monville ex Labouret) Merregalli | G. monvillei ssp. brachyanthum (Gürke) H.Till [A] Synonym G. ourselianum (Cels ex Salm-Dyck) Y.Ito nom. inval. [A] |
| G. uruguayense v. roseiflorum Y.Ito | Artigas-Uruguay | G. lecanum v. roseiflorum Y.Ito | G. hyptiacanthum ssp. uruguayense (Monville ex Labouret) Merregalli | G. mesopotamicum Kiesling [H], [A], [K] Synonym G. angelae Merregalli [H] |
| -A-A2 (H.Till) Series Macrosemineum Aggregat-Multiflora | | | | |
| G. fleischerianum (Merregalli, Metzger, & Kiesling) Vala Ladislav | Cordillera-Paraguay Paraguay-Paraguay | G. fleischerianum Backeberg nom. inval. G. paraguayense f. fleischerianum Merregalli, Metzger, & R.Kiesling | G. paraguayense (Schumann) Hosseus | G. paraguayense (Schumann) Hosseus [H], [A], [K] Synonym G. paraguayense f. fleischerianum Merregalli, Metzger, & R.Kiesling [H] |
| G. mesopotamicum Kiesling | Corrientes-Argentina | | G. mesopotamicum Kiesling | G. paraguayense f. fleischerianum Merregalli, Metzger, & R.Kiesling [K] Synonym G. ourselianum (Cels ex Salm-Dyck) Y.Ito nom. inval. [A] |
| G. multiflorum (Hooker) Britton & Rose sensu Till | Corrientes-Argentina? paraguay? | E. multiflorum Hook G. multiflorum v. albispinum (K.Schum.) Backeberg G. multiflorum v. parisense (K.Schum.) Backeberg G. oehmeanum nom. nud. | Names of Uncertain Application | G. horstii Baining [H], [A], [K] G. horstii ssp. buenekeri (Baining) Swales [H] Synonym G. buenekeri (Baining) Swales [H] G. buenekeri (Baining) Swales [A], [K] Synonym G. horstii v. buenekeri Baining nom. inval. [A], [K] |
| G. multiflorum v. ourselianum Cels ex H.Till & W.Till | Corrientes-Argentina | G. ourselianum (Cels ex Salm-Dyck) Y.Ito nom. inval. | Names of Uncertain Application | G. horstii Baining [H], [A], [K] G. horstii ssp. buenekeri (Baining) Swales [H] Synonym G. buenekeri (Baining) Swales [H] G. buenekeri (Baining) Swales [A], [K] Synonym G. horstii v. buenekeri Baining nom. inval. [A], [K] |
| G. paraguayense (Schumann) Hosseus | Cordillera-Paraguay Paraguay-Paraguay Nueva Asuncion-Paraguay | E. multiflorum v. hybopleurus K.Schumann G. denudatum v. paraguayense F. Haage G. megalothelon (Sencke ex K.Schumann) Britton & Rose From Paraguay? | G. paraguayense (Schumann) Hosseus | G. horstii Baining [H], [A], [K] G. horstii ssp. buenekeri (Baining) Swales [H] Synonym G. buenekeri (Baining) Swales [H] G. buenekeri (Baining) Swales [A], [K] Synonym G. horstii v. buenekeri Baining nom. inval. [A], [K] |
| G. paraguayense v. scheiderianum (F. Haage) Schütz | paraguay | G. scheiderianum nom. nud. | | G. horstii Baining [H], [A], [K] G. horstii ssp. buenekeri (Baining) Swales [H] Synonym G. buenekeri (Baining) Swales [H] G. buenekeri (Baining) Swales [A], [K] Synonym G. horstii v. buenekeri Baining nom. inval. [A], [K] |
| G. paraguayense v. wagnerianum (F. Haage) Schütz | paraguay | G. denudatum v. wagnerianum (F. Haage) Y.Ito nom. inval. G. wagnerianum nom. nud. | | G. horstii Baining [H], [A], [K] G. horstii ssp. buenekeri (Baining) Swales [H] Synonym G. buenekeri (Baining) Swales [H] G. buenekeri (Baining) Swales [A], [K] Synonym G. horstii v. buenekeri Baining nom. inval. [A], [K] |
| G. paraguayense v. wieditzianum (F. Haage) Schütz | paraguay | G. denudatum v. wieditzianum (Haage jun.) Y.Ito nom. inval. G. wieditzianum nom. nud. | | G. horstii Baining [H], [A], [K] G. horstii ssp. buenekeri (Baining) Swales [H] Synonym G. buenekeri (Baining) Swales [H] G. buenekeri (Baining) Swales [A], [K] Synonym G. horstii v. buenekeri Baining nom. inval. [A], [K] |
| G. heuschkelianum nom. nud. | paraguay? | G. denudatum v. heuschkelianum (F. Haage) Y.Ito nom. inval. | | G. horstii Baining [H], [A], [K] G. horstii ssp. buenekeri (Baining) Swales [H] Synonym G. buenekeri (Baining) Swales [H] G. buenekeri (Baining) Swales [A], [K] Synonym G. horstii v. buenekeri Baining nom. inval. [A], [K] |
| G. megalothelon (Sencke ex K.Schumann) Britton & Rose From Paraguay | paraguay | G. paraguayense (Schumann) Hosseus? G. megalothelos v. delatianum (F. Haage) Schütz? | | G. horstii Baining [H], [A], [K] G. horstii ssp. buenekeri (Baining) Swales [H] Synonym G. buenekeri (Baining) Swales [H] G. buenekeri (Baining) Swales [A], [K] Synonym G. horstii v. buenekeri Baining nom. inval. [A], [K] |
| -A-A2 (H.Till) Series Macrosemineum Aggregat Horstiana | | | | |
| G. buenekeri (Baining) Swales | Rio Grande de Sul-Brazil | G. horstii v. buenekeri Baining nom. inval. G. bueningii nom. nud. G. pentacanthum nom. nud. G. denudatum v. pentacanthum nom. nud. | G. horstii ssp. buenekeri (Swales) Brown & Hofacker | G. horstii Baining [H], [A], [K] G. horstii ssp. buenekeri (Baining) Swales [H] Synonym G. buenekeri (Baining) Swales [H] G. buenekeri (Baining) Swales [A], [K] Synonym G. horstii v. buenekeri Baining nom. inval. [A], [K] |
| G. horstii Baining | Rio Grande de Sul-Brazil | | G. horstii Baining | G. horstii Baining [H], [A], [K] G. horstii ssp. buenekeri (Baining) Swales [H] Synonym G. buenekeri (Baining) Swales [H] G. buenekeri (Baining) Swales [A], [K] Synonym G. horstii v. buenekeri Baining nom. inval. [A], [K] |
| G. horstii ssp. megalanthum Amerhauser | Rio Grande de Sul-Brazil | | G. horstii Baining | G. horstii Baining [H], [A], [K] G. horstii ssp. buenekeri (Baining) Swales [H] Synonym G. buenekeri (Baining) Swales [H] G. buenekeri (Baining) Swales [A], [K] Synonym G. horstii v. buenekeri Baining nom. inval. [A], [K] |

A Red character : Text that should be noted, especially
A blue character : Text that should be noted.

This table is designed by Takashi Shimada

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Table 10 ; Comparison between detailed classification of Genus Gymnocalycium by AGG and other rough classifications (About Pileisperma Group(Aggregat))

| Classification of Genus Gymnocalycium by AGG and others | Habitat | Synonym (depends on AGG etc.) | Synonym of rough classification by Mr. Graham Charles | Rough classification and Synonym By Dr. D.Hunt, Dr. E.Anderson and Dr.R.Kiesling < [H] Hunt, [A] Anderson, [K] Kiesling > |
|--|---|---|---|--|
| -A-A3(H.Till) Subsectio Pileisperma Aggregat-Pileisperma | | | Subgenus Trichoseminum | G. bodenbenderianum (<i>Hosseus ex Berger</i>) A.W. Hill [H], [A] |
| G. bodenbenderianum (<i>Hosseus ex Berger</i>) A.W. Hill | La Rioja(Sierra de Ulapes) Argentina | G. bodenbenderianum(<i>Hosseus ex Berger</i>) A.W. Hill sensu stricto | G. bodenbenderianum(<i>Hosseus ex Berger</i>) A.W. Hill | Synonym G. riojense <i>Fric ex H.Till & W.Till</i> [H] |
| G. bodenbenderianum ssp. intertextum (<i>Backeberg ex H.Till</i>) H.Till | Cordoba-Argentina | G. intertextum <i>Backeberg ex H. Till</i> | G. ochotereneae <i>Backeberg</i> | G. platygonum <i>Schütz</i> nom. nud. [H] G. piltziorum <i>Schütz</i> [H] |
| G. bodenbenderianum ssp. intertextum f. moserianum Lambert | Cordoba-Argentina | G. moserianum <i>Schutz</i> | G. ochotereneae <i>Backeberg</i> | G. intertextum <i>Backeberg ex H.Till</i> [A] G. bodenbenderianum ssp. intertextum <i>Backeberg ex H.Till</i> H.Till [A] |
| G. bodenbenderianum ssp. intertextum v. intermedium nom.nud. | Cordoba-Argentina | G. intermedium <i>Piltz</i> nom. nud. | G. ochotereneae <i>Backeberg</i> | G. moserianum <i>Schütz</i> [A] G. ochotereneae <i>Backeberg</i> [H], [A], [K] |
| G. occultum (<i>Fric ex Till & W. Till</i>) H.Till | Catamarca-Argentina | G. stellatum ssp. occultum <i>Fric ex Till & W. Till</i> | G. bodenbenderianum(<i>Hosseus ex Berger</i>) A.W. Hill | Synonym G. ochotereneae v. cinereum <i>Backeberg</i> [A], [K] G. ochotereneae v. polygonum <i>Backeberg</i> nom. inval. [K] G. ochotereneae v. scoparium <i>H.Till & Neuhuber</i> [K] G. ochotereneae v. tenuispinum <i>Backeberg</i> nom. inval. [K] G. ochotereneae v. variispinum <i>Backeberg</i> nom. inval. [K] |
| G. ochotereneae <i>Backeberg</i> | San Luis-Argentina | G. ochotereneae v. cinereum <i>Backeberg</i> G. ochotereneae v. polygonum <i>Backeberg</i> nom. inval. G. ochotereneae v. tenuispinum <i>Backeberg</i> nom. inval. G. ochotereneae v. variispinum <i>Backeberg</i> nom. inval. | G. ochotereneae <i>Backeberg</i> | G. ochotereneae ssp. vatteri (<i>Buining</i>) <i>Papsch</i> [H] G. ochotereneae ssp. herbsthoferianum <i>H.Till & Neuhuber</i> [H], [K] G. intertextum <i>Backeberg ex H. Till</i> [H], [K] |
| G. ochotereneae v. scoparium <i>H.Till & Neuhuber</i> | San Luis-Argentina | | G. ochotereneae <i>Backeberg</i> | G. ochotereneae ssp. herbsthoferianum <i>H.Till & Neuhuber</i> [A] |
| G. ochotereneae ssp. herbsthoferianum <i>H.Till & Neuhuber</i> | San Luis-Argentina | | G. ochotereneae <i>Backeberg</i> | G. ochotereneae ssp. vatteri (<i>Buining</i>) <i>Papsch</i> [A], [K] |
| G. ochotereneae ssp. vatteri (<i>Buining</i>) <i>Papsch</i> | Cordoba-Argentina | G. vatteri <i>Buining</i> | G. ochotereneae <i>Backeberg</i> | Synonym G. vatteri <i>Buining</i> [A], [K] G. ochotereneae ssp. vatteri v. altauinense <i>Papsch</i> [K] |
| G. ochotereneae ssp. vatteri v. altauinense <i>Papsch</i> | Cordoba-Argentina | | G. ochotereneae <i>Backeberg</i> | G. ragonesei <i>Castellanos</i> [H], [A], [K] G. stellatum <i>Spegazzini</i> [H], [A], [K] |
| G. paucispinum (<i>Backbg. ex H.Till & W.Till</i>) H.Till | La Rioja-Argentina Catamarca-Argentina | G. asterium v. paucispinum <i>Backeberg</i> nom. inval. G. stellatum v. paucispinum <i>Backeberg</i> <i>Strong</i> nom. inval. G. riojense ssp. paucispinum <i>Backbg. ex H.Till & W.Till</i> | G. bodenbenderianum(<i>Hosseus ex Berger</i>) A.W. Hill | Synonym G. asterium <i>Y.Ito</i> nom. illeg. [H], [A], [K] G. obductum <i>Piltz</i> [H] |
| G. ragonesei <i>Castellanos</i> | Cordoba-Argentina Catamarca-Argentina | | G. ragonesei <i>Castellanos</i> | G. stellatum ssp. occultum <i>Fric ex Till & W. Till</i> [H], [K] G. asterium v. paucispinum <i>Backeberg</i> nom. inval. [K] G. bodenbenderianum(<i>Hosseus ex Berger</i>) A.W. Hill [K] G. occultum <i>Fric ex Schütz</i> [K] |
| G. riojense <i>Fric ex H.Till & W.Till</i> | La Rioja-Argentina Catamarca-Argentina San Juan-Argentina | G. bodenbenderianum(<i>Hosseus ex Berger</i>) A.W. Hill sensu lato | G. bodenbenderianum(<i>Hosseus ex Berger</i>) A.W. Hill | G. piltziorum <i>Schütz</i> [K] G. platygonum <i>Schütz</i> nom. nud. [K] G. quehlianum v. stellatum <i>Dölz</i> [K] G. riojense <i>Fric ex H.Till & W.Till</i> [K] G. riojense v. guthianum <i>H.Till & W.Till</i> [K] G. riojense v. pipanaoense <i>H.Till & W.Till</i> [K] |
| G. riojense v. pipanaoense <i>H.Till & W.Till</i> | Catamarca-Argentina La Rioja-Argentina | G. bodenbenderianum v. pipanaoense <i>H.Till & W.Till</i> <i>Piltz</i> | G. bodenbenderianum(<i>Hosseus ex Berger</i>) A.W. Hill | G. riojense ssp. piltziorum <i>Schütz ex H.Till & W.Till</i> [K] G. riojense ssp. kozelskianum v. mirandaense <i>H.Till & W.Till</i> [K] G. riojense ssp. kozelskianum v. sanjuanense <i>H.Till & W.Till</i> [K] G. riojense ssp. paucispinum <i>Backbg. ex H.Till & W.Till</i> [K] G. riojense ssp. paucispinum v. platygonum <i>Schütz ex H.Till & W.Till</i> [K] G. triacanthum <i>Backeberg</i> nom. inval. [K] |
| G. riojense ssp. guasayanense (<i>Strigil</i>) <i>H.Till</i> | Santiago de Este-Argentina Catamarca-Argentina | G. riojense ssp. paucispinum v. guasayanense <i>Strigil</i> | G. bodenbenderianum(<i>Hosseus ex Berger</i>) A.W. Hill | Dr. Kiesling is still insisting on G. stellatum=G. bodenbenderianum=G. riojense |
| G. riojense ssp. kozelskianum <i>Schuetz ex H.Till & W.Till</i> | La Rioja-Argentina San Juan-Argentina Catamarca-Argentina | G. kozelskianum <i>Schütz</i> nom. inval. | G. bodenbenderianum(<i>Hosseus ex Berger</i>) A.W. Hill | G. obductum <i>Piltz</i> [A] G. stellatum ssp. occultum <i>Fric ex Till & W. Till</i> [A] |
| G. riojense ssp. kozelskianum v. mirandaense <i>H.Till & W.Till</i> | La Rioja-Argentina San Juan-Argentina | G. bodenbenderianum v. mirandaense <i>H.Till & W.Till</i> <i>Piltz</i> | G. bodenbenderianum(<i>Hosseus ex Berger</i>) A.W. Hill | G. riojense <i>Fric ex H.Till & W.Till</i> [A] |
| G. riojense ssp. kozelskianum v. sanjuanense <i>H.Till & W.Till</i> | San Juan-Argentina, La Rioja-Argentina | G. bodenbenderianum v. sanjuanense nom. nud. | G. bodenbenderianum(<i>Hosseus ex Berger</i>) A.W. Hill | Synonym G. triacanthum <i>Backeberg</i> nom. inval. [A] |
| G. riojense ssp. piltziorum <i>Schuetz ex H.Till & W.Till</i> | Catamarca-Argentina La Rioja-Argentina | G. piltziorum <i>Schütz</i> | G. bodenbenderianum(<i>Hosseus ex Berger</i>) A.W. Hill | G. riojense ssp. kozelskianum <i>Schütz ex H.Till & W.Till</i> [A] G. riojense ssp. piltziorum <i>Schütz ex H.Till & W.Till</i> [A] |
| G. riojense ssp. piltziorum v. guthianum (<i>H.Till & W.Till</i>) <i>H.Till</i> | La Rioja-Argentina | G. bodenbenderianum v. guthianum nom. nud. G. riojense v. guthianum <i>H.Till & W.Till</i> | G. bodenbenderianum(<i>Hosseus ex Berger</i>) A.W. Hill | G. riojense ssp. paucispinum <i>Backbg. ex H.Till & W.Till</i> [K] G. riojense ssp. paucispinum v. platygonum <i>Schütz ex H.Till & W.Till</i> [K] |
| G. riojense ssp. platygonum (<i>Schuetz ex H.Till & W.Till</i>) <i>H.Till</i> | Catamarca-Argentina La Rioja-Argentina | G. platygonum <i>Schütz</i> nom. nud. G. riojense ssp. paucispinum v. platygonum <i>Schuetz ex H.Till & W.Till</i> | G. bodenbenderianum(<i>Hosseus ex Berger</i>) A.W. Hill | G. robustum <i>R.Kiesling, Ferrari & Metzger</i> [H], [K] |
| G. riojense ssp. vertongenii <i>Amerhauser</i> | La Rioja-Argentina | | | Synonym G. quehlianum (<i>F. Haage ex Quehl</i>) <i>Vaupel ex Hosseus</i> [H] |
| G. stellatum <i>Spegazzini</i> | Cordoba-Argentina | G. quehlianum v. stellatum <i>Dölz</i> | G. quehlianum (<i>F. Haage ex Quehl</i>) <i>Vaupel ex Hosseus</i> | G. quehlianum (<i>F. Haage ex Quehl</i>) <i>Vaupel ex Hosseus</i> [A], [K] |
| G. stellatum v. flavispinum <i>Bozsing ex H.Till & W.Till</i> | Cordoba-Argentina | G. quehlianum v. flavispinum <i>Bozsing ex Backeberg</i> nom. inval. G. quehlianum v. albispinum <i>Bozsing ex Backeberg</i> nom. inval. | G. quehlianum (<i>F. Haage ex Quehl</i>) <i>Vaupel ex Hosseus</i> | Synonym E. quehlianum <i>F. Haage ex Quehl</i> [K] G. quehlianum v. albispinum <i>Backeberg</i> nom. inval. [K] G. stellatum v. flavispinum <i>Bozsing ex H. Till & W. Till</i> [K] G. stellatum v. zantnerianum <i>Schick</i> <i>H. Till & W. Till</i> [K] |
| G. stellatum v. kleinianum <i>Rausch ex H.Till & W.Till</i> | Cordoba-Argentina | G. quehlianum v. kleinianum <i>Rausch</i> nom. nud. | G. quehlianum (<i>F. Haage ex Quehl</i>) <i>Vaupel ex Hosseus</i> | G. quehlianum and G. stellatum were confused for a long time. We adopt G.robustum for the Ovatiseminum's species and stellatum for the Trichoseminum's species [H] |
| G. stellatum v. obductum (<i>Piltz</i>) <i>H.Till & W.Till</i> | Cordoba-Argentina Catamarca-Argentina | G. obductum <i>Piltz</i> | G. quehlianum (<i>F. Haage ex Quehl</i>) <i>Vaupel ex Hosseus</i> | |
| G. stellatum v. zantnerianum (<i>Schick</i>) <i>H.Till & W.Till</i> | Cordoba-Argentina | G. quehlianum v. zantnerianum <i>Schick</i> G. quehlianum v. rolifianum <i>Schick</i> | G. quehlianum (<i>F. Haage ex Quehl</i>) <i>Vaupel ex Hosseus</i> | |

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 R. Kiesling Cat. de las Plantas Vasculares de la Republica Argentina 1999, Instituto de Botanica Darwinion 2007 Web Page
 Graham Charles Gymnocalycium In Habitat and Culture 2009

A Red character : Texta that should be noted, especially
A blue character : Texta that should be noted.

This table is designed by Takashi Shimada

Table 11 ; Comparison between detailed classification of Genus Gymnocalycium by AGG and other rough classifications (About Terminalia Group(Aggregat)

| Classification of Genus Gymnocalycium by AGG and others | Habitat | Synonym (depends on AGG etc.) | Synonym of rough classification by Mr. Graham Charles | Rough classification and Synonym by Dr. D.Hunt, Dr. E.Anderson and Dr.R.Kiesling < [H] Hunt, [A] Anderson, [K] Kiesling > |
|--|--|--|--|--|
| -B-B1 (H.Till) Subsectio Terminalia-Aggregat Terminalia | | | Subgenus Muscoseminum | G. anisitsii ssp. damsii (Scumann) Chares [H] |
| G. damsii (K.Schum) Britton & Rose | Santa Cruz-Bolivia Bahia Negra-Paraguay | | G.anisitsii ssp. damsii(Scumann) Chares | Synonym G. anisitsii ssp. multiproliferum(P. J. Braun) P. J. Braun & Esteves [H] G. damsii v. multiproliferumP.J. Braun [H] |
| G. damsii v. multiproliferum P.J. Braun | Mato Grosso do Sul-Brazil | G. anisitsii ssp. multiproliferum(P. J. Braun) P. J. Braun & Esteves | G.anisitsii ssp. damsii(Scumann) Chares | G. anisitsii (K. Schumann) Britton & Rose [H], [A] |
| G. damsii ssp. evae Halda & Milt | Santa Cruz-Bolivia | | G.anisitsii ssp. damsii(Scumann) Chares | Synonym G. damsii (K.Schumann) Britton & Rose [A] |
| G. damsii ssp. evae v. boosii Amerhauser | Santa Cruz-Bolivia | | G.anisitsii ssp. damsii(Scumann) Chares | G. griseopalidumBackeberg [H], [A] |
| G. damsii subsp evae v. centrispinum Backeberg ex H.Till & Amerhauser | Santa Cruz-Bolivia | G. damsii var. centrispinum Backeberg nom. inval. | G.anisitsii ssp. damsii(Scumann) Chares | G. joossensianum(Boedeker) Britton & Rose [A] |
| G. damsii subsp evae v. jossensianum (Boed) Britton & Rose ex H.Till & Amerhauser | | G. joossensianum(Boed) Britton & Rose | G.anisitsii ssp. damsii(Scumann) Chares | G. joossensianum = G. schickendantzii ssp. delaetii [H] |
| G. damsii ssp evae v. rotundulum Backeberg ex H.Till & Amerhauser | Santa Cruz-Bolivia | G. damsii v. rotundulum Backeberg nom. inval. | G.anisitsii ssp. damsii(Scumann) Chares | |
| G. damsii ssp. evae v. torulosum Backeberg | Santa Cruz-Bolivia | G. damsii v. torulosum Backeberg nom. inval. | G.anisitsii ssp. damsii(Scumann) Chares | |
| G. eurypleurum Plesnik ex Ritter | Nueva Asuncion-Paraguay Boqueron-Paraguay Alto Paraguay-Paraguay | | G. eurypleurumPlesnik ex Ritter | G. anisitsii ssp. multiproliferum (P.J.Braun) P.J.Braun & Esteves [A] Synonym G. damsii v. multiproliferumP.J. Braun [A] |
| G. friedrichii (Werderm.) Pazout ex Schütz | Santa Cruz-Bolivia Cordillera-Bolivia Boqueron-Paraguay | G. mihanovichii v. friedrichii Werdermann G. mihanovichii v. melocactiformePazout G. mihanovichii v. angustotrianumPazout | G. stenopleurumF.Ritter | G. anisitsii ssp. mihanovichii? [H] Synonym G. mihanovichii(Fric ex Gurke) Britton & Rose [H] |
| G. friedrichii v. moserianum Pazout | Nueva Asuncion-Paraguay Boqueron-Paraguay Alto Paraguay-Paraguay | G. mihanovichii v. friedrichii fa. nigrumY.Ito | G. stenopleurumF.Ritter | G. mihanovichii (Fric ex Gurke) Britton & Rose [A], [K] |
| G. friedrichii v. albiflorum Pazout ex Schütz | Tarja-Bolivia Santa Cruz-Bolivia Boqueron-Paraguay | G. mihanovichii v. albiflorumPazout G. mihanovichii v. rysanekianumPazout G. mihanovichii v. fleischerianumPazout G. stenopleurumF.Ritter ? | G. stenopleurumF.Ritter | G. stenopleurum Ritter [H], [A], [K] Synonym G. friedrichii (Werderm.) Pazout ex Schütz [H], [A], [K] G. mihanovichii v. friedrichiiWerdermann [A], [K] |
| G. friedrichii v. piraritaense (Pazout)Pazout | | G. mihanovichii v. piraritaense Pazout G. friedrichii v. pazoutianumMoser & Valnicek nom. illeg. G. friedrichii v. piraritaense(Pazout) Pazout nom. inval. | G. stenopleurumF.Ritter | G. eurypleurum Plesnik ex Ritter [H], [A] G. eytianum Cardenas [A] |
| G. friedrichii ssp. eytianum (Cardenas) H.Till & Amerhauser | Santa Cruz-Bolivia | G. eytianum Cardenas | Names of Uncertain Application (G. marsoneri ssp. megatae(Y.Ito) Chares) | G. marsoneri ssp. matoense (Buning & Brederoo) P.J.Braun & Esteves [H], [A] Synonym G. eytianum Cardenas [H] G. fricianum Plesnik [H] G. hamatum F.Ritter [H], [A] G. matoense Buning et Brederoo [H], [A] G. megatae Y.Ito [H] G. onychacanthum Y. Ito [H] G. pseudomalacocarpusBackeberg [H] G. tortuga Blossfeld ex Backeberg [H] G. tudaie Y.Ito [H] |
| G. mihanovichii (Fric ex Gurke) Britton & Rose | Alto Paraguay-Paraguay Boqueron-Paraguay Santa Cruz-Bolivia | | G. mihanovichii(Fric ex Gurke) Britton & Rose | |
| G. mihanovichii v. stenogonum Fric & Pazout | Chaco Austra-Argentina Corrientes-Argentina | G. mihanovichii (Fric ex Gurke) Britton & Rose G. mihanovichii v. filadelfenseBackeberg G. mihanovichii v. chloristicumF. Ritter | G. mihanovichii(Fric ex Gurke) Britton & Rose | |
| G. stenopleurum Ritter | Boqueron-Paraguay Nueva Asuncion-Paraguay | G. friedrichii v. albiflorumPazout ex Schütz, p.p | G. stenopleurumF.Ritter | |

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A Red character : Texta that should be noted, especially.
A blue character : Texta that should be noted.

This table is designed by Takashi Shimada

Table 12 ; Comparison between detailed classification of Genus *Gymnocalycium* by AGG and other rough classifications (About *Schickendantziana*, *Periferalia* Group(Aggregat))

| Classification of Genus <i>Gymnocalycium</i> by AGG and others | Habitat | Synonym (depends on AGG etc.) | Synonym of rough classification by Mr. Graham Charles | Rough classification and Synonym By Dr. D.Hunt, Dr. E.Anderson and Dr.R.Kiesling < [H] Hunt, [A] Anderson, [K] Kiesling > |
|---|--|--|--|--|
| -B-B2-h (H.Till) Series <i>Schickendantziana</i>-Aggregat <i>Schickendantziana</i> | | | Subgenus <i>Muscosemimum</i> | <i>G. delaetii</i> (K.Schumann) A.V.Fric [A] |
| <i>G. delaetii</i> (K.Schumann) A.V.Fric | Salta-Argentina Tucuman-Argentina La Rioja-Argentina | <i>G. schickendantzii</i> var. <i>delaetii</i> (K.Schumann) Backeberg <i>G. antherosteles</i> F.Ritter | <i>G. schickendantzii</i> ssp. <i>delaetii</i> (K.Schumann) Chares | Synonym <i>G. schickendantzii</i> v. <i>delaetii</i> (K.Schumann) Backeberg [A] <i>G. schickendantzii</i> v. <i>delaetii</i> (K.Schumann) Backeberg [K] |
| <i>G. delaetii</i> f. <i>antherosacos</i> F.Ritter ex Neuhauser | Salta-Argentina | <i>G. antherosacos</i> F.Ritter nom. nud. | <i>G. schickendantzii</i> ssp. <i>delaetii</i> (K.Schumann) Chares | Synonym <i>G. delaetii</i> (K.Schumann) A.V.Fric [K] |
| <i>G. delaetii</i> ssp. <i>marsoneri</i> (Fric ex Y.Ito) H.Till & Amerhauser | Salta-Argentina Tucuman-Argentina Chuquisaca-Bolivia Nueva Asunción-Paraguay | <i>G. marsoneri</i> Fric ex Y.Ito <i>G. tudae</i> v. <i>marsoneri</i> Piltz <i>G. knebelii</i> Fric nom. nud. | <i>G. marsoneri</i> Fric ex Y.Ito | <i>G. schickendantzii</i> ssp. <i>delaetii</i> (K.Schumann) A.V.Fric [H] Synonym <i>G. schickendantzii</i> v. <i>delaetii</i> (K.Schumann) Backeberg [H] <i>G. delaetii</i> (K.Schumann) A.V.Fric [H] <i>G. joossensianum</i> (Boedeker) Britton & Rose [H] |
| <i>G. hamatum</i> F. Ritter | Chuquisaca-Bolivia Tarija-Bolivia | | <i>G. marsoneri</i> ssp. <i>megatae</i> (Y.Ito) Chares | <i>G. marsoneri</i> Fric ex Y.Ito [H], [A], [K] |
| <i>G. schickendantzii</i> (F.A.C.Weber) Britton & Rose | Tucuman-Argentina Salta-Argentina Catamarca-Argentina La Rioja-Argentina San Juan-Argentina Cordoba-Argentina San Luis-Argentina | <i>G. michoga</i> Fric ex Y.Ito nom. illeg., p.p | <i>G. schickendantzii</i> (F.A.C.Weber) Britton & Rose | Synonym <i>G. fricianum</i> Plenik [A] <i>G. knebelii</i> Fric nom. nud. [K] <i>G. megatae</i> Y.Ito [A] <i>G. pseudomalacocarpus</i> Backeberg [A] <i>G. onychacanthum</i> Y. Ito [A] <i>G. tortuga</i> Blossfeld ex Backeberg [A] <i>G. tudae</i> Y.Ito [A] |
| <i>G. schickendantzii</i> ssp. <i>bergeri</i> Neuhauser | Salta-Argentina | <i>G. michoga</i> Fric ex Y.Ito nom. illeg., p.p | <i>G. schickendantzii</i> (F.A.C.Weber) Britton & Rose | <i>G. schickendantzii</i> (F.A.C.Weber) Britton & Rose [H], [A], [K] |
| <i>G. schickendantzii</i> ssp. <i>pectinatum</i> Neuhauser | La Rioja-Argentina | <i>G. schickendantzii</i> v. <i>pectinispinum</i> J.Lambert <i>G. schickendantzii</i> v. <i>pectinatum</i> Neuhauser | <i>G. schickendantzii</i> (F.A.C.Weber) Britton & Rose | Synonym <i>G. antherosteles</i> F.Ritter [H], [A], [K] <i>G. michoga</i> Fric ex Y.Ito nom. illeg. [H], [A], [K] <i>G. pungens</i> Fleischer [K] |
| <i>G. schickendantzii</i> ssp. <i>periferalium</i> Neuhauser | Cordoba-Argentina | | <i>G. schickendantzii</i> (F.A.C.Weber) Britton & Rose | <i>G. marsoneri</i> ssp. <i>matoense</i> (Baining & Brederoo) P.J.Braun & Esteves [H], [A] |
| <i>G. pungens</i> Fleischer | | <i>G. schickendantzii</i> (F.A.C.Weber) Britton & Rose | <i>G. schickendantzii</i> (F.A.C.Weber) Britton & Rose | Synonym <i>G. eytianum</i> Cardenas [H] <i>G. fricianum</i> Plenik [H] <i>G. hamatum</i> F.Ritter [H], [A] <i>G. matoense</i> Baining et Brederoo [H], [A] <i>G. megatae</i> Y.Ito [H] <i>G. onychacanthum</i> Y. Ito [H] <i>G. pseudomalacocarpus</i> Backeberg [H] <i>G. tortuga</i> Blossfeld ex Backeberg [H] <i>G. tudae</i> Y.Ito [H] |
| <i>G. lumbresense</i> Ritter nom. nud. | Salta-Argentina | | <i>G. schickendantzii</i> ssp. <i>delaetii</i> (K.Schumann) Chares | <i>G. marsoneri</i> ssp. <i>matoense</i> (Baining & Brederoo) P.J.Braun & Esteves [H], [A] |
| -B-B2-i (H.Till) Series <i>Periferalia</i>-Aggregat <i>Periferalia</i> | | | Subgenus <i>Muscosemimum</i> | Synonym |
| <i>G. anisitsii</i> (K.Schum) Britton & Rose | Santa Cruz-Bolivia Concepcion-Paraguay | | <i>G. anisitsii</i> (K.Schum) Britton & Rose | <i>G. eytianum</i> Cardenas [H] |
| <i>G. anisitsii</i> v. <i>griseopallidum</i> H.Till & Amerhauser | Santa Cruz-Bolivia Chuquisaca-Bolivia | <i>G. griseopallidum</i> Backeberg. nom. nud. | <i>G. anisitsii</i> (K.Schum) Britton & Rose | <i>G. fricianum</i> Plenik [H] |
| <i>G. anisitsii</i> v. <i>pseudomalacocarpus</i> Backeberg ex H.Till & Amerhauser | Santa Cruz-Bolivia | <i>G. pseudomalacocarpus</i> Backeberg nom. nud. | <i>G. marsoneri</i> ssp. <i>megatae</i> (Y.Ito) Chares | <i>G. hamatum</i> F.Ritter [H], [A] |
| <i>G. anisitsii</i> ssp. <i>holdii</i> Amerhauser | Santa Cruz-Bolivia | | <i>G. marsoneri</i> ssp. <i>megatae</i> (Y.Ito) Chares | <i>G. matoense</i> Baining et Brederoo [H], [A] |
| <i>G. anisitsii</i> ssp. <i>holdii</i> v. <i>tucavocense</i> Backeberg ex H.Till & Amerhauser | Santa Cruz-Bolivia | <i>G. damsii</i> v. <i>tucavocense</i> Backeberg nom. inval. | <i>G. anisitsii</i> ssp. <i>damsii</i> (Schumann) Chares | <i>G. megatae</i> Y.Ito [H] |
| <i>G. anisitsii</i> ssp. <i>volkeri</i> Amerhauser | Santa Cruz-Bolivia | | <i>G. stenopleurum</i> F.Ritter | <i>G. megatae</i> Y.Ito [K] |
| <i>G. megatae</i> Y.Ito | Santa Cruz-Bolivia Cochabamba-Bolivia Boqueron-Paraguay | <i>G. onychacanthum</i> Y. Ito <i>G. piricarpum</i> nom. nud. <i>G. rotundricarpum</i> (Fric) nom. nud. <i>G. tudae</i> Y.Ito <i>G. tortuga</i> Blossfeld ex Backeberg <i>G. tudae</i> v. <i>chuquisacanum</i> nom. nud. ? <i>G. tudae</i> v. <i>bolivianum</i> F. Ritter <i>G. brevistylum</i> nom. nud. | <i>G. marsoneri</i> ssp. <i>megatae</i> (Y.Ito) Chares | Synonym <i>G. eytianum</i> Cardenas [K] <i>G. fricianum</i> Plenik [K] <i>G. tudae</i> Y.Ito [K] |
| <i>G. megatae</i> ssp. <i>matoense</i> (Baining et Brederoo) H.Till & Amerhauser | Mato Grosso do Sul-Brazil | | <i>G. marsoneri</i> ssp. <i>matoense</i> (Baining et Brederoo) Braun & Esteves | <i>G. anisitsii</i> ssp. <i>damsii</i> (Schumann) Chares [H] |
| <i>G. megatae</i> ssp. <i>zecheri</i> Amerhauser | | <i>G. megatae</i> Y.Ito <i>G. tudae</i> sensu F. Ritter | | Synonym <i>G. anisitsii</i> ssp. <i>multiproliferum</i> (P. J. Braun) P. J. Braun & Esteves [H] <i>G. damsii</i> v. <i>multiproliferum</i> P.J. Braun [H] |
| <i>G. fricianum</i> Plesnik | Bolivia? Paraguay? | <i>G. megatae</i> Y.Ito <i>G. mihanovichii</i> (Fric ex Gurke) Britton & Rose | <i>G. marsoneri</i> ssp. <i>megatae</i> (Y.Ito) Chares | <i>G. anisitsii</i> (K. Schumann) Britton & Rose [H], [A] |
| | | | | Synonym <i>G. damsii</i> (K.Schumann) Britton & Rose [A] <i>G. joossensianum</i> (Boedeker) Britton & Rose [A] <i>G. joossensianum</i> = <i>G. schickendantzii</i> ssp. <i>delaetii</i> [H] <i>G. griseopallidum</i> Backeberg [H], [A] <i>G. anisitsii</i> ssp. <i>multiproliferum</i> (P. J. Braun) P. J. Braun & Esteves [A] <i>G. damsii</i> v. <i>multiproliferum</i> P.J. Braun [A] |
| | | | | <i>G. anisitsii</i> ssp. <i>mihanovichii</i>? [H] |
| | | | | Synonym <i>G. mihanovichii</i> (Fric ex Gurke) Britton & Rose [H] |

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