

Changelog

This is a support document for material on the [Practical Small Cacti Malaysia site](#).

Short Changelog for the December 2021 Edition

This section is a summary of changes made moving from the June 2021 Edition to the December 2021 Edition. List items are always sorted by filename. See the next section for the detailed changes.

Minor changes to:

- ◆ Cactus Cultivation in the Tropics (008_cultivation)
- ◆ Complications of Shrinking (013_shrinking_complications)
- ◆ Grafting: 2019 Specimens Part 2 (054_grafting_2019_pt2)

New material in:

- ◆ Nutrition for Your Cacti (006_nutrition)
- ◆ Battling Bugs (007_battling_bugs)
- ◆ More About Foliar Feeding (012_foliar_feeding)
- ◆ Grafting Part 2 (052_grafting_pt2)
- ◆ Grafting: 2019 Specimens Part 1 (053_grafting_2019_pt1)
- ◆ Data and Charts (091_data_charts)

New chapters:

- ◆ Flowers and Forcing Flowers Part 2 (016_flowers_forcing2)
- ◆ Getting Commodity Cacti to Flower (017_ccacti_to_flower)

Detailed Changelog for the December 2021 Edition

Numbers in square brackets, e.g. [9] references the page number of the *updated* document.

- ◆ 001_introduction [1]: Updated number of consecutive months with new flowers to 70.
- ◆ 006_nutrition [16–17]: Added a section on silicon fertilizer experimentation and initial positive results.
- ◆ 007_battling_bugs [31–32]: Added discussion on sulfur and silicon to combat the problem with black patches on areoles among GBalds.
- ◆ 008_cultivation [6–7]: Updated discussion on growing cacti indoors, added a picture of the side collection.
- ◆ 012_foliar_feeding [17–27]: Added much more material to PClav section.
- ◆ 013_shrinking_complications [5]: Added a picture plus caption discussing the difficulty of assessing the condition of a GBald.
- ◆ 016_flowers_forcing2: **New chapter.**
- ◆ 017_ccacti_to_flower: **New chapter.**
- ◆ 052_grafting_pt2 [23–28]: Added progress of the ex-graft GBald in the second half of 2021.
- ◆ 053_grafting_2019_pt1 [2–4]: Extended discussion of first grafting session, added a few more pictures.
- ◆ 053_grafting_2019_pt1 [21]: Added pictures showing shrunken cut surfaces of the stocks.
- ◆ 054_grafting_2019_pt2 [24]: Added a picture with flowers on the lower part of the stem.
- ◆ 054_grafting_2019_pt2 [25]: Added to discussion on growth phases to maturity. Adjusted caption due to new picture on previous page.
- ◆ 054_grafting_2019_pt2 [32]: Updated discussion on the use of a silicon fertilizer.
- ◆ 091_data_charts [4,7,10,13,15,17,19,20]: Updated 2021–2022 charts with Jun–Nov data. Added short discussion notes related to the new data.

Short Changelog for the June 2021 Edition

This section is a summary of changes made moving from the December 2020 Edition to the June 2021 Edition. List items are always sorted by filename. See the next section for the detailed changes.

General adjustments:

- ◆ There is now a clickable link to the website on the first page of each PDF.
- ◆ The URL of the website has also been added to the informational final page of each PDF.

Minor changes to:

- ◆ A Few Other Species (004_other_species)
- ◆ Repotting Cacti (009_repotting)
- ◆ Propagation Via Offsets (010_propagation_offsets)
- ◆ Flowers and Forcing Flowers (011_flowers_forcing)
- ◆ Complications of Shrinking (013_shrinking_complications)
- ◆ Roots in Rocks (014_roots_in_rocks)
- ◆ Seeds and Volunteer Seedlings (071_seeds_vseedlings)

New material in:

- ◆ The Perils of Commodity Cacti (002_commodity_cacti)
- ◆ The Winners (003_the_winners)
- ◆ Battling Bugs (007_battling_bugs)
- ◆ More About Foliar Feeding (012_foliar_feeding)
- ◆ Data and Charts (091_data_charts)

Split up and material added:

- ◆ Grafting Part 1 (051_grafting_pt1)

New chapters:

- ◆ Hooray for Healthy Roots (015_healthy_roots)
- ◆ Grafting Part 2 (052_grafting_pt2)
- ◆ Grafting: 2019 Specimens Part 1 (053_grafting_2019_pt1)
- ◆ Grafting: 2019 Specimens Part 2 (054_grafting_2019_pt2)
- ◆ Grafting: 2019 Specimens Part 3 (055_grafting_2019_pt3)
- ◆ Seed Sowing Experiments 2019 (072_seed_experiments_2019)

Detailed Changelog for the June 2021 Edition

Numbers in square brackets, e.g. [9] references the page number of the *updated* document.

- ◆ For each PDF, a link to the website was added to the first page.
- ◆ For each PDF, the URL of the website was added to the informational final page.
- ◆ 001_introduction [1]: Updated number of consecutive months with new flowers to 64.
- ◆ 002_commodity_cacti [13]: Adjusted section title due to addition of a new section.
- ◆ 002_commodity_cacti [14–15]: Added a discussion about online sales of C&S in Malaysia.
- ◆ 003_the_winners [13–14]: Extended discussion about home-grown GBalds versus commercially-grown GBalds, and climate or microclimate effects.
- ◆ 003_the_winners [16]: Expanded discussion on the dangers of MGeo spines.
- ◆ 004_other_species [14]: Added footnote on *G. stellatum* flowering in March 2021.
- ◆ 007_battling_bugs [4]: Added a page on bird droppings, an uncommon threat.
- ◆ 007_battling_bugs [20]: Mention algae in fungus gnat section.
- ◆ 007_battling_bugs [30]: Mention fungal spores and wet weather in black patch section.
- ◆ 009_repotting [9]: Updated flower forcing info for the two PClav offsets.
- ◆ 010_propagation_offsets [3]: Changed “0.5 inch” to “½ inch” (a cosmetic tweak).
- ◆ 010_propagation_offsets [3]: Adjusted ‘still alive’ date to May 2021.
- ◆ 011_flowers_forcing [8,21]: Updated info for flower forcing in 2020 for 2 PClavs.
- ◆ 011_flowers_forcing [30]: Clarified that only 1 of the 4 *Parodias* that were forced is actually willing to flower on its own prior to 2021.
- ◆ 012_foliar_feeding [4]: Inserted a short section on a flowering Echeveria.
- ◆ 012_foliar_feeding [6]: Updated progress: experiment abandoned, harvested offsets instead.
- ◆ 012_foliar_feeding [13–16]: Updated PClav section with info on recent flowering behaviour, and the renewed growth of its large offset thanks to direct foliar sprays.
- ◆ 013_shrinking_complications [29]: Updated section to mention GStella offset flowering.
- ◆ 014_roots_in_rocks [18]: Updated with info on GStella offset flowering.
- ◆ 015_healthy_roots: **New chapter.**
- ◆ 051_grafting_pt1 [2]: Mentions ‘rootstock’ as the actual proper term for ‘stock’.
- ◆ 051_grafting_pt1 [8]: Updated flower count for 2020, added flower count for 2021.
- ◆ 051_grafting_pt1 [36–41]: Swapped two sections and updated the discussion. Sections after the GBald scion has detached was moved into a new chapter, 052_grafting_pt2.
- ◆ 052_grafting_pt2 [1–22]: **New chapter.** Split and reworked post-grafting sections from 051_grafting_pt1, plus plenty of new material.
- ◆ 053_grafting_2019_pt1: **New chapter.**
- ◆ 054_grafting_2019_pt2: **New chapter.**
- ◆ 055_grafting_2019_pt3: **New chapter.**
- ◆ 071_seeds_vseedlings [19]: Corrected typo. (‘contaner’)
- ◆ 071_seeds_vseedlings [19]: Updated footnote on hyperhydricity to point to next chapter.
- ◆ 072_seed_experiments_2019: **New chapter.**
- ◆ 091_data_charts [2–20]: Completed 2019–2020 charts. Added 2021–2022 charts. Added some brief discussion notes on the data and adjusted a bit of the older discussion.

Short Changelog for the December 2020 Edition

This section is a summary of changes made moving from the June 2020 Edition to the December 2020 Edition. List items are always sorted by filename. See the next section for the detailed changes.

File renamed:

- ◆ Flowers and Forcing Flowers (011_flowers_forcing)

Minor changes to:

- ◆ Introduction (001_introduction)
- ◆ The Winners (003_the_winners)
- ◆ Useful Concepts (005_useful_concepts)
- ◆ Cactus Cultivation in the Tropics (008_cultivation)
- ◆ Repotting Cacti (009_repotting)

Significant new material in:

- ◆ Propagation Via Offsets (010_propagation_offsets)

New chapters:

- ◆ More About Foliar Feeding (012_foliar_feeding)
- ◆ Complications of Shrinking (013_shrinking_complications)
- ◆ Roots in Rocks (014_roots_in_rocks)
- ◆ Grafting Part 1 (051_grafting_pt1)
- ◆ Seeds and Volunteer Seedlings (071_seeds_vseedlings)
- ◆ Data and Charts (091_data_charts)

Detailed Changelog for the December 2020 Edition

Numbers in square brackets, e.g. [9] references the page number of the *updated* document.

- ◆ 001_introduction [1]: Updated number of consecutive months with new flowers to 58.
- ◆ 003_the_winners [12]: Added to the behaviour of GBald flowers.
- ◆ 003_the_winners [13]: Added picture and discussion of GBald on sale.
- ◆ 005_useful_concepts [15]: Corrected description of red tray. There were some holes that were completely covered with nappy liner, and in practice water will still pool under the tray.
- ◆ 008_cultivation [30]: Adjusted for clarity, 2 months with flower every day in Jan–May 2020.
- ◆ 009_repotting [1]: Adjusted caption of grafted GBald, due to addition of its chapter.
- ◆ 009_repotting [23]: Added footnote for discussion of end-of-life behaviour elsewhere.
- ◆ 009_repotting [25]: Modified discussion in light of findings discussed in Roots in Rocks.
- ◆ 010_propagation_offsets [1]: Adjusted introduction due to sections changed or added.
- ◆ 010_propagation_offsets [3]: Deleted footnote, GBald tray is covered in new section.
- ◆ 010_propagation_offsets [5]: Added paragraph on GSteno offsets with roots.
- ◆ 010_propagation_offsets [6]: Added picture of detached GBald offsets with roots.
- ◆ 010_propagation_offsets [19]: Added paragraph on May 2019 harvest of two offsets.
- ◆ 010_propagation_offsets [20–21]: Extended section, added May 2019 harvest pictures
- ◆ 010_propagation_offsets [22]: Tweaked caption due to addition of pages 20–21.
- ◆ 010_propagation_offsets [23–27]: New section, on the red tray of rooted GBald offsets.
- ◆ 011_flowers_forcing: Renamed from 031_flowers_forcing.
- ◆ 012_foliar_feeding: **New chapter.**
- ◆ 013_shrinking_complications: **New chapter.**
- ◆ 014_roots_in_rocks: **New chapter.**
- ◆ 051_grafting_pt1: **New chapter.**
- ◆ 071_seeds_vseedlings: **New chapter.**
- ◆ 091_data_charts: **New chapter.**

Version Information

This is the December 2021 Edition of this document.

Every released PDF can be found at: <https://www.mysmallcacti.net/>

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Colophon

Written on LibreOffice. Most images were produced using GIMP and IrfanView. PDF tested using SumatraPDF. Fonts used include Liberation Serif, Arimo and Liberation Mono. The document is sized for A4 or Letter printing with enough whitespace for comfortable reading.

All pictures used to produce the images in the document were taken by the author unless otherwise stated. Images are not meant to be of art print quality. The pictures were taken by unsteady hands without a tripod, then they are cut or resized and finally resampled to about 150 DPI and a JPEG quality of 80 for screen reading and also to keep file sizes manageable.