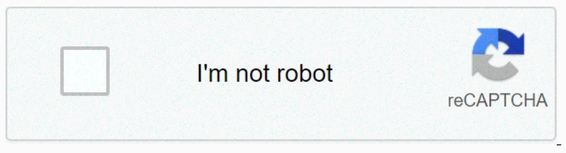
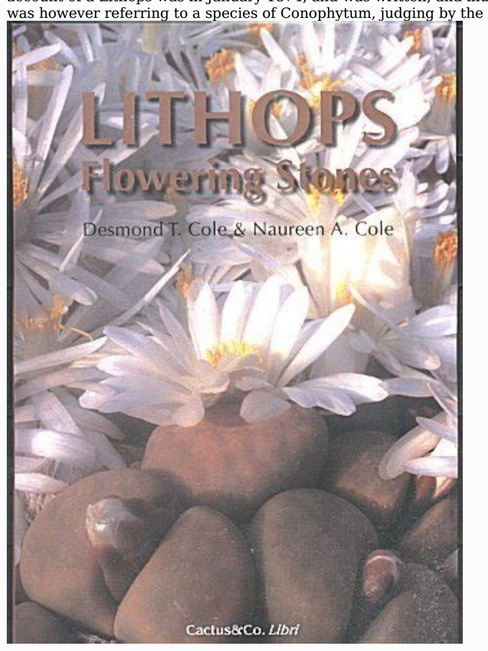


I'm not robot!

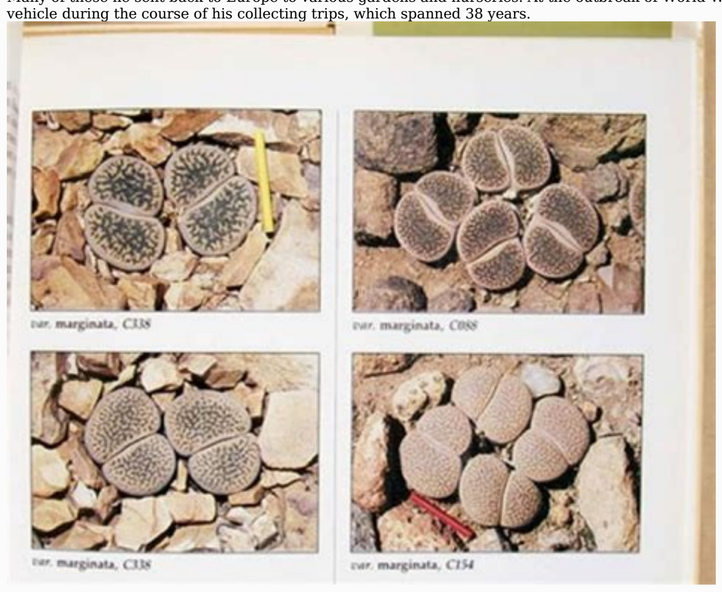
Lithops flowering stones pdf

How to get lithops to flower. Are lithops hard to grow.

William Burchell's 1811 Lithops - Photo source: Lithops - Flowering Stones, Desmond & Naureen Cole The first recorded account of a Lithops was by William Burchell in 1811. He discovered the plant on the 14th of September of that year at a place he named 'Zand Valley', which lies south-east of the present-day town of Prieska. Below is what he wrote in his book, Travels in the interior of southern Africa, published in two volumes, in 1822 and 1824: "On picking up from the stoney ground, what was supposed a curiously shaped pebble, it proved to be a plant, an additional new species to the numerous tribe of the Mesembryanthemum: but in colour and appearance bore the closest resemblance to the stones between which it was growing." In his book, is a drawing which was done by him of the plant he saw (see photo above). It is accompanied by the following words: "Mes. a very distinct & new sp. distinguishable from all the dumplings (an old vernacular name for some species of Conophytum) by being horizontal at top" A year before the publication of Burchell's book in 1822, A.H. Haworth published a description of the plant based on Burchell's drawing. Haworth named the plant Mesembryanthemum turbiniforme, and a year later, in 1922, after N.E. Brown had established the genus Lithops, he renamed the plant Lithops turbiniformis (Haw.) N.E. Brown. The next written account of a Lithops was in January 1874, and was written, and illustrated, by J.D. Hooker in The Curtis Botanical Magazine (see photo below). He called the plant Mesembryanthemum truncatellum, a name which had already been used to describe another plant, thought to be the same as this one. The original description, by Adrian Haworth in 1803, was however referring to a species of Conophytum, judging by the description.

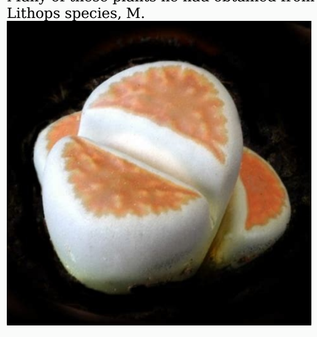


The plant illustrated by Hooker was actually what we now call L. hookeri. The name was thus not valid, and the plant in question needed renaming. The next influential person to come on the scene was Moritz Kurt Dinter, who was a keen collector of exotic succulents. He worked at the famous La Mortola gardens, on the Italian Riviera, known for its large collection of South African bulbs and succulents, and he also spent some time at the Kew botanical gardens. His interests eventually took him on a journey, to what was then, South West Africa, and there he began exploring the areas between Walvis Bay and Luderitz. He eventually settled, and began building up a vast collection of succulents. Many of these he sent back to Europe to various gardens and nurseries. At the outbreak of World War One, he was forced to return to Germany. He went back in 1922, after the war, working with the financial backing of Ernst Julius Rusch, and Dr. I.B. Pole Evans and a few others. It is estimated that he covered 40 000 km on foot, by wagon and motor vehicle during the course of his collecting trips, which spanned 38 years.



His collection of pressed specimens numbered in excess of 8 400.

Dinter's explorations, resulted in many new succulent plants being sent to Europe, and some of them landed up at his former workplace, the La Mortola gardens. His successor, Alwin Berger, a prolific writer, and skilled botanical artist, used many of these new plant specimens as reference material. His goal was to write a guidebook for all the main groups of succulent plants. He began with a series of three small volumes one of them covering the Mesembryanthemum. He described, amongst many other plants, Mesembryanthemum hookeri in 1874, and in 1908 Mesembryanthemum pseudotruncatellum. The name hookeri, was given to the original plant described by Hooker, as M. truncatellum, in honour of it's original source. The name pseudotruncatellum, he then used for a another new species. Shortly after Berger described the two Lithops species, Rudolf Marloth described another newly discovered species of Lithops, which he discovered himself in April 1909, while on one of his many trips exploring Southern Africa. He published the new species as M. opticum, in 1910. Marloth went on to write The Flora of South Africa, a monumental work which was published in 6 volumes between 1913 and 1932. In it was a painting, done by him of a Lithops in habitat (see image below). Marloth had a particular interest in the "mimicry" of many of the Mesembryanthemum, and he published various articles on this topic. R. Marloth - Stone-Shaped Plants At this point in time, the Mesembryanthemum family was in dire need of some attention, and it was Nicholas Edward Brown who stepped up to the challenge. Brown's interest in succulents had been sparked when he visited W.W. Saunders, who had a very large collection of succulents. Many of these plants he had obtained from the widow of Adrian Haworth, who had given them to him, after the death of her husband. Brown eventually ended up working for him, and upon Saunder's recommendation, was later employed at the Kew Herbarium. He ended up working there for 40 years, and during this time he published two new Lithops species, M.



lesliei in 1912, and M. fulviceps in 1914. After his retirement in 1914, he decided to begin working on breaking up the large family of Mesembryanthemums into smaller groups. While he was doing this, he published another two species of Lithops, M. marmoratum in 1920, and M. localis in 1922. At this point he made a major breakthrough with his work. He started to study the structure of the seed capsules of the Mesembryanthemum family, because this he felt was the key to splitting the family into smaller groups. The genus Lithops was a result of this work, the word coming from a combination of the Greek words lithos, meaning a stone, and ops, a face. The first new Lithops to fall under the newly created genus, was described by Brown in the same year, and was named L. bella. While Brown was working on splitting up the Mesembryanthemums, Gustav Schwantes was working in Germany, trying to achieve the same goal. An intellectual feud developed, and the two men became fiercely competitive, often publicly attacking one another in their writings for various publications. Schwantes was hurt by the animosity, and one day while he was in London, he passed by Brown's home. He considered knocking on his door and greeting him, but felt he would not be welcome, so never did. Many of the plants that Schwantes studied came from Kurt Dinter, and Schwantes honored him by crediting him when published them. In 1925 he published 6 new species of Lithops: M. francisci, M. julii, M. eberlanzii, M. lericheanum, M.
ruschiorum and M. vallis-mariae.
They were all published as Mesembryanthemum followed by the word Lithops in brackets, due to the difference in opinion that had developed between the two rivals. While these two were battling it out, Margaret Louisa Bolus was working at the Bolus Herbarium in Cape Town on her own system of organising the Mesembryanthemum family. The rivalry now became a three way battle, and a lot of time and energy was wasted in pursuing it. Brown died in 1934, publishing his last Lithops species, L fulleri in 1927. Louisa Bolus went on to describe a lot of the new Lithops species, and she spent a lot of her time concentrating on the Mesembryanthemum. She spent over 60 years on their study, and worked up until she was 90 years old. She died in 1970.

Dr H.W. de Boer - Photo source: Lithops, G.C. Nel Kurt Dinter returned to Germany in 1935, at the age of 67, and spent a lot of time writing descriptions of many of the plants he had discovered while he was in South West Africa. He was one of the few people who was allowed into the restricted diamond areas, and in 1929 he discovered the very rare L.
optica var. rubra. He described and discovered many of the Lithops species, before his death in 1945.
At the same time that Brown created the genus Lithops, Gert Nel was appointed Professor of Botany at the University of Stellenbosch. One of his first tasks, was to create a botanical garden, and he was joined by Hans Herre. The two men began building up a collection of succulents, which gained international repute. Nel and Herre spent many hours in the field studying and collecting plants, unlike many of the leading experts of the time, who had only studied the plants in cultivation. They both spent a large part of their careers dedicated to the study of the Mesembryanthemum. Herre went on to publish The Genera of the Mesembryanthemaceae, a great contribution to the field. Nel published the first book dedicated to the genus Lithops, and also published many new species, 9 in total. His book Lithops, published in 1946, became the main source of information about Lithops at the time, and it was complimented with many beautiful watercolour paintings done by Evelyn Kraemer. Shortly after Nel published his book, Dr. Hendrik de Boer, a food technologist from Groningen in the Netherlands began collecting Lithops and Conophytums. Upon his retirement in 1950, he began taking them up as more than just a hobby, and he eventually started to publish articles about them. He published 15 new species of Lithops over a period of 17 years, and also built up one of the largest collections of Lithops of the time. In 1954, Desmond Cole, a Professor of languages, at the University of the Witwatersrand in Johannesburg, discovered a few species of Lithops in a florist's shop. The plants ignited a passion in him, and he began to search for any information he could about these fascinating little plants.

He soon built up a large collection of Lithops, and searched for as much information as he could find on them. He became friends with Hebdrik de Boer, and eventually met him in 1961. Over a period of 50 years, Desmond and his wife Naureen, spent all their spare time and financial resources learning about these plants. They travelled across the globe in search of not only plants, but any published information that they could find. They spent many hours travelling around Southern Africa in search of plants in their natural habitats, and eventually ended up visiting over 450 different localities where Lithops grow.
At each locality, they collected plants, seeds, rock and soil, which they took back to their "Lithoparium". They then began a detailed study of the various plants, which led to the publication of Lithops: Flowering Stones, which is regarded as the "bible" on Lithops. Besides doing the research, they also sent many seeds and some plants to various collectors and botanical gardens around the world, and a lot of plants and seed we now see sold in nurseries, originated from their collection. Their dedication to the genus is an inspiration, and has inspired similar passion in others, making Lithops one of the most popular succulents in cultivation today.
The cultivator The history of Lithops would not be complete without a mention of one of the most interesting characters associated with them. Steven Hammer, originally a pianist by profession, became interested in Lithops soon after his first encounter with them when he was only 11 years old. His passion for Lithops, as well as many other members of the Mesembryanthemum family, soon took centre stage, and he dedicated his time to learning as much as he could about them. He travelled to Southern Africa on numerous occasions, in his quest for knowledge. He has written numerous articles on the topic, including his book, Lithops Treasures of the Veld, and his passion and enthusiasm has ignited similar feelings in many others.
His travels also eventually led him to the discovery of two new species, L.
coleorum, named in honour of the Coles, and L. hermetica. The future The history of man's association with Lithops is far from over, and Lithops will continue to ignite a sense of wonder, in all those who come across these unique and fascinating plants. Bibliography Herre, H.
1971. The Genera of the Mesembryanthemaceae. Tahfelberg-Uitgewers Beperk. Rowley, Gordon. 1997. A history of succulent plants. Strawberry Press. Hammer, S.A. 1999.
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1986. A Handbook of Succulent Plants. Volumes I-III. Blandford, Poole, Dorset.
Above are three maps, the first one shows the general distribution of Lithops, the second shows the percentage of annual rainfall that falls in summer, and the third shows the average rainfall each of the areas receives annually. You can click on them to enlarge them. Detailed distribution maps of the various species For more information about the distribution of the various species, I have created a some maps with a lot more detail. These maps give a better idea of the distribution of the various species, and how their ranges often overlap with one another.
The maps contain a lot of detail, and are in PDF format, so that you can zoom into certain areas to get a closer look. There are five different maps, all contained in one file.
Distribution Maps Cole locality data Most of the information available to us today regarding Lithops, was the result of the dedicated work done by Professor Desmond Cole and his wife Naureen Cole. Over the years they have visited many localities where Lithops grow, and these localities were all assigned what are known as Cole numbers.
At each locality, they collected specimen plants, and seeds. These were all assigned codes, and many of the Lithops we now find in cultivation have these Cole numbers attached. The numbers give us information about the original spot that the plants in question come from, and I have compiled a list of these plants.
Cole Localities