



# Photobook to raise awareness about the illicit trafficking of orchids through knowledge of the legal trade

## Fotolibro para generar conciencia sobre el tráfico ilícito de las orquídeas a través del conocimiento del circuito comercial formal

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### Abstract

This project originates from a problem related to the illicit sale of orchids. It seeks to reflect this unfavorable scenario for the orchid market in the city of Moyobamba, the production and trade of the species. For this reason, the context surrounding the orchid is evident educationally and dynamically through a photobook, with the intention of raising consumer awareness of the orchid. In addition, a quantitative and qualitative analysis is used through surveys and in-depth interviews, where a sample of 153 people is taken to evaluate the results of the project.

Finally, based on the results obtained after the presentation of the book and the evaluation of the results, it is shown that the majority of the participants did not know the development circuit of orchids, nor the legal and illegal market that surrounds them. That is why, the book fulfills its main objective: to raise awareness and inform about the orchid market in Peru and especially in Moyobamba, the nerve center of orchid development in the country.

**Keywords:** Flora, Peruvian orchids, illicit trade, extinction

### Resumen

*Este proyecto se origina a raíz de una problemática relacionada con la venta ilícita de orquídeas. Busca reflejar este escenario desfavorable para el mercado de la orquídea en la ciudad de Moyobamba, eje de producción y comercio de la especie. Para ello, se evidencia el contexto que rodea a la orquídea didáctica y dinámicamente a través de un fotolibro, con la intención de lograr la concientización del consumidor de la planta. Asimismo, se emplea un análisis cuantitativo y cualitativo a través de encuestas y entrevistas a profundidad, donde se toma una muestra de 153 personas para evaluar los resultados del proyecto.*

*Finalmente, a partir de los resultados obtenidos tras la presentación del libro y la evaluación de los resultados, se demuestra que la mayoría de las personas participantes no conocían a profundidad el circuito de desarrollo de las orquídeas, así como tampoco el mercado legal e ilegal que las rodea. En este sentido, el libro cumple con su objetivo principal: concientizar e informar acerca del mercado de las orquídeas en el Perú y sobre todo en Moyobamba, centro neurálgico de desarrollo de la orquídea en el país.*

**Palabras clave:** flora, orquídeas peruanas, comercio ilícito, extinción

## ◆ Introduction



According to research carried out by the National Forestry and Wildlife Service (SERFOR, 2020), there is an alarming growth in the illicit trade of Peruvian wild orchids. This situation has caused serious consequences in the country, since it has affected not only the survival of these species, but also the market and the tourism sector. The jungle area of the city of Moyobamba, where the largest number of orchids are found in the country, has been especially vulnerable to this problem. Also, it has been noted that this fraudulent practice has been encouraged in the area for several years, so it has been essential to take measures to eradicate this illegal trade and protect both the orchids and the ecosystem and legal market that revolve around them. them, with the understanding that, without action, this situation will continue to put the country's sustainability at risk.

The wealth of orchid varieties in the Moyobamba-Peru area is impressive, both in terms of their shape and color. However, this area has also been especially harmed by the illegal orchid trade due to its high level of production. The illegal orchid trade has been driven by several factors, including demand from collectors willing to pay large sums of money and casual buyers' lack of knowledge about the provenance of the orchids they purchase. In this sense, the small number of formal Peruvian nurseries certified by SERFOR has also contributed to the proliferation of illegal trade.

The solution to this problem requires a comprehensive approach that includes strengthening regulation and control of the trade, increasing education and awareness about the importance of orchids and sustainability, and encouraging the development of formal certified nurseries. It is also important to work collaboratively with local communities and non-governmental organizations to protect these species and promote sustainable practices. If no action is taken, the illegal orchid trade will continue to cause harm to the species, the market and the tourism sector. It is essential to act now to ensure a sustainable future for orchids and the Moyobamba area.

The aggressive bidding of this particular species, as mentioned above, may be motivated by its significance as ostentatious or luxurious decoration for many families. However, this desire to have this species as decoration collides with the reality that there are few places of production, which encourages consumers to seek to obtain it illegally and at much higher prices than those in the formal market. As Cavero, Collantes and Patroni (2017) point out, this has been counterproductive, since not only has it been promoting illegal sales, but it has also been favoring the predation of the species, which has a negative impact on biodiversity. of our country and in the global ecosystem.

It is important to mention that there is currently strategic planning by the Peruvian government with the main objective of reducing this problem, in addition to protecting the biodiversity of Peru and the species of wild flora that are in danger of extinction until they can overcome this condition. However, it is necessary to continue working on this issue and establish effective measures to reduce illegal demand and supply, as well as promote the conservation and sustainable management of these species. In the long term, it is essential to involve society in this effort, through awareness and education campaigns, to achieve a change in the attitudes and behaviors of consumers and suppliers and achieve greater conservation of biodiversity.

**◆ Main goal** This project was a valuable initiative to share the message of the importance of preserving and promoting the formal orchid market. The idea of using a book of real photographs of orchids was intended to connect with the general public in an emotional way, since visual communication is often more effective than the use of words, especially in the case of orchids, which They are valued for their visual and aesthetic properties.

The predation of orchids is a criminal activity that occurs throughout Peru and its exorbitant increase in recent years has attracted attention. However, it is important to highlight that the problem of orchid predation is not only Peruvian, but is global in scope. This problem is related to the unsustainable demand for orchids for decoration and commerce, and the lack of regulation and adequate control of their trade. In this sense, the project was an opportunity to raise awareness about the impact of orchid predation on biodiversity and the global ecosystem. In addition to being an opportunity to promote the formal and sustainable trade in orchids, and to educate society about the importance of the conservation of orchids and other species of wild flora. In the long term, it is essential to involve all relevant actors, including government, industry and society in general, to achieve a change in the attitudes and behaviors of consumers and suppliers, and achieve greater conservation of biodiversity.

The research carried out has focused on the preservation and promotion of the formal orchid market in Peru, specifically in the central jungle of the country, where the greatest presence of these wild plants is currently found, due to the existence of cloud forests that favor their development. According to López (2017), the departments of Cusco, Pasco, San Martín, Junín, Amazonas, Huánuco and Piura are the places where these orchids are found prolifically. However, the city of Moyobamba was selected for this research because it is the most affected by the illicit activity of orchid predation, in addition to having the most suitable climate in the country for the development of these species. This problem was recognized at the end of 2015 and, despite the efforts of the Peruvian government to safeguard local biodiversity through its strategic plan, it is still present eight years later.

In this sense, the National Conservation Plan for Endangered Orchids of Peru was launched, a government strategy that seeks to preserve and rescue areas affected by the illegal trade of orchids, as well as problems of deforestation and attacks against Peruvian biodiversity (SERFOR, 2020). This plan seeks to protect threatened orchids and their habitat, and promote sustainable trade in these species. This has important repercussions, since the problem of orchid predation not only affects the species and their habitat, but also the residents who live in the area. Predation and the informal market affect the ecosystem where they live, decrease the interaction and interest of tourists to visit their city, and can have a negative impact on their local economy. Therefore, illicit orchid trafficking in the region has been a major problem that must be addressed effectively and sustainably to protect the species and their habitat, and to improve the living conditions of local residents.

According to López (2017), there are four species that are especially required of the 20 currently traded: *Phragmipedium kovachii*, *Cattleya rex*, *Cattleya maxima*, *Cattleya luteola* and *Cattleya violácea*. Much of its commercialization is due to its expansion in the Moyobamba area, where these species are found both in nurseries and in surrounding areas such as the city, the main square, the streets and more.



Figure 1. *Intervention at the flower market.*  
 Source: Agraria.pe Communications Team. (February 2, 2017). Orchids and bromeliads of illegal origin are seized in Rímac. Agraria.pe. Recovered from <https://agraria.pe/noticias/decomisan-orquideas-y-bromelias-de-procedencia-ilegal-13094>  
 Note: Authorities intervened in the Piedra Liza Flower Market and found that more than 400 wild forest species were illegally extracted from their natural habitat.



Figure 2. *SERFOR intervention.*  
 Source: Avelino, C. (2018). SERFOR intervention. [Photography]. Nueva Cajamarca, San Martín, Peru.  
 Note: Traffic in more than 50 orchids.

The emphasis of the research has been placed on the city of Moyobamba, known as “the city of orchids”, due to the large quantity and variety of these plants in the area. Through the implementation of measures to prevent and punish the illegal trade in orchids, and the promotion of sustainable and conscious practices among consumers, we sought to preserve the natural wealth of this region and ensure its continuity in the future, as well as strengthen education and environmental awareness to avoid the pettiness and lack of knowledge of illegal sellers and those who encourage these unhealthy practices through illegal purchasing. It is important to mention that this research has not only focused on the protection of orchids, but also on the care of all the wild species present in the area, since all of them are fundamental for the ecological balance and natural beauty of the region.

The selection of the Moyobamba territory as a study site in this project has been strategic, due to the large number of people involved in the care and preservation of orchids in the area. For example, Caro Villena, owner of the Amazónico nursery, has been a leader in the certification and care of orchids in the region and her nursery was the only official and certified by SERFOR until 2015. In addition, the design of the project included the presentation of a photographic book, which has been useful for photographers, since it has allowed them to have an educational presentation of the material and provide greater interaction with the recipient, whether user, client or neophyte. The use of these physical resources has also helped maintain the memory and record of these projects or investigations through printed photographs that can remain as an official document for many years. In that sense, this project sought not only the preservation of orchids in the area, but also the promotion of education and environmental awareness to guarantee their continuity in the future.

### ◆ Project description

The main objective of the project in question was the creation of a photographic book focused on the species of Peruvian orchids that are in extinction and that are located in the city of Moyobamba. The structure of the book consists of three chapters, the first of which is titled “The beginning of the end”, which details the 12 species that are in extinction and are presented divided by categories according to their conservation status, such as vulnerable, threatened, and in critical danger. In addition, the areas where these species could be acquired legally commercially are mentioned, with the aim of responsibly contributing to consumption in the official market and thus helping to prevent their predation. This photo book can also be used as an educational tool to promote environmental awareness and the importance of preserving these endangered species. In addition, it is a valuable source of information for researchers and specialists in the field of orchids, as it allows them to know and closely monitor the conservation status of these species. In this way, this project sought not only to document and publicize the critical situation of Peruvian orchids, but also to contribute to the preservation of these species, through the promotion of sustainable practices and environmental education. It is important to mention that this project was only part of a broader effort to preserve the biodiversity of the Moyobamba region and we hope that more actions will be carried out in the future to achieve this.

The second chapter of the photobook, titled “Let yourself be captivated,” focuses on presenting the 20 varieties of orchids most sold in the country. Among them are well-known species such as *Cattleya rex*, *Cattleya maxima*, *Epidendrum capricornu* and *Phragmipedium caudatum*. In addition to providing information on their geographic distribution, guidance is also provided on the care protocols necessary to keep them in optimal condition. In the third chapter, titled “City of



Orchids”, the three most popular species of the aforementioned city are highlighted, among them, *Phragmipedium caudatum*, *Phragmipedium kovachii* and *Cattleya maxima*. The objective was to provide complete, but accessible, knowledge about the development and commercialization environment of orchids, attracting the attention of enthusiasts of these wild species. To achieve this, the content focused on visual presentation, which represents 80% of the book, along with precise scientific information about necessary care and the current commercial situation in the area. The book was available in two formats: print and digital.

On the other hand, the relationship between the problem and the objective was essential for the presentation of the research work, especially in a world in which the accessibility of information is increasingly widespread. With this approach, it was decided to publish the presentation in both formats, in order to achieve greater impact and eliminate any barrier to access and viewing the work. The objective was that the general public could know and disseminate the reality of the problem in depth, regardless of the specific context. The book, in its 200 pages, presented material collected in nurseries, reserves and local sources, with the aim of showing the various phases of the problem in Moyobamba. The photographs were presented in a professional manner, through an editorial and photographic design, using a language of illustration and vector design as a basis for the aesthetics of the book. The final objective was to create a dynamic, fun, educational and entertaining harmonious set, which would encourage interest in each species shown in the book. As for the target audience, no age parameters were established, since the material is intended for anyone interested and curious about wildlife in general or these tropical species in particular. In the future, it is expected that the book will contribute to raising awareness and awareness about environmental problems and the protection of wildlife both in Moyobamba and in general.

In accordance with the implementation of the project, it focused on the formulation and analysis of questions to obtain truthful answers about the perception of the problem and its awareness by the target audience. To achieve this, a list of 11 questions was developed that addressed the problem, care, and taking responsible action, as well as a question to receive general comments and criticism about the photobook. In addition, accounts were created on social networks, such as Tik Tok, Instagram and Facebook, with the name “*Orquídeas al natural*”, to publish images of the orchids, informative posts, stories and invitations to the book presentation event; and an outbound marketing strategy was carried out by placing a link to the photobook to facilitate downloads and awareness through the viralization of the information (see QR of the photobook-Al Natural)



These actions attempt to achieve greater reach and awareness among the target audience regarding the problems of orchids and the importance of their care and conservation.

The event for the presentation of the book on orchid trafficking in the Amazon region was held both in person, at the Amazónicas nursery, and virtually, through Zoom. Google Forms formats were used to conduct virtual surveys and the link for the online presentation was shared six days before the event. The presentation began with a description of the visual project and then continued with a detailed presentation on the problem of orchid trafficking in the region. The presentation also included the launch of the photobook and the project logo. At the end, the QR code of the survey was shared to receive comments and determine if the photobook met its objective of informing and raising awareness among the target audience. In summary, greater coherence was sought in the event, greater support was added and a future perspective was considered for the evaluation and continuous improvement of the project.

The 96 surveys conducted among event attendees about the material offered revealed that the book was highly motivating and educational for them. In addition, it was discovered that many of them were not aware of the support that the State provides for the care of vegetation in the city. Participants also found the orchid photobook particularly useful, as it contains valuable information about the diversity, official care centers and the current state of the environment of this species. The event managed to raise awareness among visitors about the different perspectives of the world of orchids, making them reflect on the problem of illegal trade of this plant and their role in it. Furthermore, it was evident that many orchid market enthusiasts had no knowledge of its reality and were unconsciously contributing to the predation of this flower. In conclusion, participants agreed that ignorance on this topic is critical and that people should be informed before purchasing orchids. The importance of disseminating information through visual means was also highlighted, as it is considered more effective in terms of impact and accessibility for the entire population.

**◆ Conclusions** The illicit trade in orchids is a problem that has affected the region for many years. Some specialists have worked continuously to achieve



great reproduction in the area. However, despite the efforts of the government and SERFOR to eradicate this problem, their effectiveness has been insufficient, due to the low level of awareness among the population and little interest in the consequences of the extinction of this species. For this reason, a photobook was created to generate interest and reflection on the care of the biodiversity of the area, with the aim of it being disseminated in an effective, viral and pregnant way, especially given the urgency of the problem and the neglect of the environment.

The methodology used in the project focused on effective communication through greater visual content, with the intention that the message was easily understandable by the recipients and assimilated quickly. To achieve this, different social media channels, such as Instagram, Facebook and Tik Tok, as well as launch platforms were used to disseminate and make both the original material and the main message viral. In this framework, it is especially relevant to mention that this made it possible to publicize the certified nurseries throughout the national territory, which provided valuable information and resources for the generation and marketing of the photobook. The official presentation of the book took place at the Amazónicas nursery, located in the Moyobamba region, San Martín, and was broadcast live via Zoom for those participants who could not be present. During the presentation, both the problem already explained and its causes and consequences were pointed out, all of which was evidenced through the photobook presented. In addition, attendees received physical copies of the book and were able to appreciate firsthand the beauty of the orchids present in the nursery. According to the results obtained, 96 participants attended, both in person and virtually, and 99% of them confirmed that the objective of the project was met, as they found the information presented relevant and easy to understand. Furthermore, the participants highlighted that the problem was addressed in a sensitive, didactic and aesthetic way, with powerful and well-directed information, through attractive images and relevant and innovative data. In summary, the project sought the dissemination of information through a methodology focused on effective visual communication and achieved its objective, achieving a wide scope and high satisfaction on the part of the participants.

In relation to the promotion and awareness of the problem of illegal orchid trafficking, it is hoped that in the future events and campaigns to disseminate the book that has been published on the matter can continue to be carried out. In addition, we will seek the support of governmental and non-governmental organizations to strengthen awareness efforts. In the medium and long term, we will seek to involve those interested people and lovers of orchids to help promote a responsible buying and selling circuit, with the aim of reducing illegal sales of this species and thus reducing the predation of orchids endemic. The final objective is to ensure that the population involved in this problem becomes aware of its impact and collaborates in stopping this serious evil. 📍

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