OTTO PENZIG, EXPLORER. THE DIARY OF THE EXPEDITION IN INDONESIA. PRESENTATION OF THE ITALIAN EDITION

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ABSTRACT

The author draws a portrait of Otto Penzig presenting the diary of his expedition in Indonesia.

KEY WORDS

Ottone Penzig, Botany, Indonesia, Krakatoa, Singapore, Ceylon

OTTO PENZIG

Otto Albert Julius Penzig (Ottone Penzig) was born in Samitz (Silesia) in 1856 (Fig. 1). He moved to France and then to Italy. In Padova knows Pier Andrea Saccardo, a naturalist and mycologist who gives him the passion for mycology. In 1886, he won the Chair of Botany at the University of Genova, where he would remain, for the rest of his life, excluding the First World War.

With his scientific and cultural relationships, the one with Thomas Hanbury, who created the Hanbury Gardens of Mortola in Ventimiglia, marks a lucky moment for the presence of creative foreigners in Liguria (Winter, Bicknell, Berger).

Penzig, with Hanbury's involvement in the situation at the University of Genova, get from him the funding for the construction of the "Hanbury Institute of Botany", within the properties of the Genoese University, with buildings, greenhouses and laboratories, of which Penzig is the director.

On the occasion of the 400th anniversary of the Discovery of America, in 1892 Penzig organized one of the first World Congress of Botany in Genova, with the financial support of Thomas Hanbury (Penzig, 1892).



Fig. 1. Ottone Penzig.

THE EXPEDITION

In the summer of 1893, a catastrophic event affects the Strait of Sunda in present-day Indonesia, then a Dutch colony: the eruption and explosion of the Krakatoa Island in the sea between Java and Sumatra.

The island of Krakatoa explodes, probably due to the invasion of seawater into deep magma, during a terrific eruption. This fact produces the raging projection at high altitude of over 1.5 cubic kilometers of rock, most of the island. A giant wave of tsunamis crashes on all islands of the archipelago, and then on the contiguous coasts of Java and Sumatra, then with a flow of hot volcanic gases and hot water vapor over the surface, leaving at the bottom of the sea a sinkhole which is still largely still to be filled today. It follows a terrible human and natural disaster.

The event was in the particular historical period of exploration and scientific research, and thus attracted the attention of scientists around the world. Penzig' scientific expedition lasted about six months between 1896 and 1897 in Indonesia, then in Singapore, and then in Ceylon (Sri Lanka), and was also based on the field study of the consequences of this event. The expedition, however, had the main interest in botany and mycology, main scientific interest of Penzig, namely the study of the *Phalloideae* of Java. This study will be published by the Dutch scientific structure of the Botanical Garden (Kebun Raja) of Buitenzorg, which hosted him (Penzig, 1899).

After the destruction by the Japanese in Indonesia during the World War II, and more precisely in the Buitenzorg Botanical Garden (now Bogor), the expedition's documentation is kept in the Nationaal Archief (National Archives) for Colonies of the Dutch government, in the Netherlands. The University of Genova keeps copies of some documents.

THE EXPEDITION DIARY AND ITS PUBLICATION

Penzig wrote a personal diary of the expedition. It has never been published or even read because of the German language and, above all, the difficult conditions in which it was written and the inks used.

This presentation concerns the recent recovery, transcription, publication and edition of this diary by Fratelli Frilli Editore of Genova (Carlini, 2016). The diary was edited and printed thanks to the heirs of Ottone Penzig, the great-grandsons Maurizio Castagna and Adele Gheza.

Mr. Maurizio Castagna, heir of Ottone Penzig, residing in Breno (Brescia), handed to me the original diary. Since I do not have adequate knowledge of German, the first task was to find a transcriber that would transfer a rather hermetic and complex text, scarcely readable in an editable form of word processing. Admirably, this person turned out to be Prof. Helmut Leithner from Gmunden (Upper Austria), my friend and correspondent in a French brotherhood of rare plant growers. Helmut Leithner has shown, well beyond the expected, a passionate scholar, with me, of the diary, to clarify historical, literary and botanical doubts and uncertainties. For the Italian translation, I used Dr. Gabriele Campodonico, a German linguist, and Antje Suzanne Rath, an Italian of German origin. The final translation of the diary is as complete as possible to the original content. As a purpose of the work, deliberately I did not make notes on the content of the text. I have only added very few notes to explain otherwise incomprehensible terms, despite the diary is written in German, words in Dutch, Indonesian, Malay, English, and even in Italian were used. Everything was then optimized and controlled for current and scientific terminology, which obviously resembles the botanical and cultural situation of the late nineteenth century. All the operators, including myself, worked for free.



Fig. 2. Prins Hendrik in the port of Genova at the end of the 19th century.

The diary begins with the journey from Losine (Brescia province) to Brescia, Milano and Genova, where Penzig embarks on Prins Hendrik (Fig. 2 and 3), a Dutch navy vessel connecting Genova with Batavia (now Jakarta, Indonesia), with stops in Suez and Aden . This journey is meticulously described.

Once in Indonesia, then the Dutch colony, Penzig is housed in the structure of the Botanical Garden of Buitenzorg (today Kebun Raja

Bogor), which with its 87 hectares is still the largest botanical garden in South East Asia and one of the major and most important worldwide.

Laboratory facilities are made available to him, and he is personally able to enlist local collaborators for his research of materials in the surrounding territories.



Fig. 3. The Penzig cabin on the Prins Hendrik.

At first, he develops his research in the botanical garden (her main interest is mycology) but early hikes in the forest and in the countryside and in the most challenging mountains, in the surrounding volcanoes (the area is particularly active from the volcanic point of view), with the examination of smaller volcanic phenomena (Fig. 4). But the research is still marked by botanical observations in the discovery of unexpected and endemic plants, and of course with the collection of massive amounts of Pteridophytes and fungi. Botanical observation on river environment, rice fields and cultivars are also important. From a botanical point of view, Penzig cites, among other things, the research of that time on the diseases that afflicted the cultivation of sugar cane in Indonesia. He notes the environmental changes caused by the massive introduction of tea cultivation and the attempts of coffee cultivation on the hills.



Fig. 4. The Merapi Volcano in Java.

However, the most interesting part of the diary is the one related to non-botanical subjects, with a description of the traditional social structure of the countryside, the villages of the peasants (kampong) and the traditional architecture of the buildings with the use of natural materials, mainly derived from ubiquitous bamboo and palm trees.

For the applied botany, Penzig already notes the turnout of cultivated plants of all kinds and of all origins. In fact, plants considered useful have already been introduced from the rest of the world, moreover from Africa and America, for food reasons (manioc, potatoes, tomatoes, papaya, pineapple) and for industrial production of resins, oils, rubber.

Penzig describes the intensive and omnipresent cultivation of rice paddies, the communications system, then in embryo and developing, with the tracing of roads and railways.

In the larger towns and villages, he notes and describes the mixing already put in place of the indigenous population with the Chinese.

Far beyond the botanical interest, Penzig describes the mix of customs, festivities and religions that shake Indonesian society, loud and bland, but ultimately in good harmony. The Dutch government is floating on it, with its "mandoer" (native government officials), which are drafting a reasonable and efficient social structure, which will then be the base, half a century later, of the structure of the independent state.

Often Penzig enriches the diary with photographs, sketches, drawings and schemes, also to describe human features and costumes. The analysis of traditional Indonesian music is remarkable: the Gamelang, with the typical string instruments, rebabs (Fig. 5), and percussion, traditional dance (slendang). In the diary he even compiled a musical line for a simple harmony. Penzig seems to be a good music critic.

The social life of Penzig is good, with visits and invitations by local notables. His diary also captures his personality, who is interested in analyzing the social and industrial development of the country. In social life, he does not neglect a few glasses of whiskey, and a few glasses of good beer, but he cannot bear, and he notices it, roughly, smoke.

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Fig. 5. Sketches and notes on Rebab player and his instrument

His current daily life, on the other hand, is dotted with the research and treatment of botanical materials, short explorations and epic returns home under the rain, then long days spent in the lab to observe, catalog, and preserve naturalistic finds, above all botanical (Fig. 6).



Fig. 6. Penzig' sketch of a canoe raft

His stay at Java culminates with the exploratory trip to Krakatoa, where, on the basis of a careful analysis of previous censuses, he updates the list of species found by him, ordered according to families (Fig. 7 and 8).

Despite his continued references to "supplementary documents" related to the diary, my repeated research at both the heirs and at the University of Genova did not allow me to come to anything and I fear that these documents should be lost.

The differences in botanical names, compared to the present, testify to the time he lived. Indeed, if many attributions are entirely still acceptable today, some others have been amended. Among these, there are the three species of Krakatoa *Ficus*, which he, as normal, attributed to the Urticaceae family.

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Fig. 7. List of plant collected or observed by Penzig in Krakatoa Island.



Fig. 8. Map of Krakatoa after August 1893

His favorite companions in his botanical stay in Java are other botanists who meet and with whom he share experiences, the Garden director, Melchior Treub (Dutch), Raciborsky (Polish), Ewarth (English), Clatriau (Belgian). The meeting with residents of the Dutch government structure, merchants, military and diplomatic is practically obvious.

He moved to Singapore where analyzes the botanical and human reality of that peculiar part of the world, the composite blend of all the people here gathered: British, Dutch, German, French, but, above all, loud and flashy, the Chinese. Penzig assists, participates and narrates the most visibly and loud events. He visits museums and temples with a different success. He is a watchful observer of botanical aspects, and botanical gardens. Comparisons with Indonesia are recurring and accurate.

From Singapore to Ceylon; once again Penzig turns page, and notes the change.

Here the colonizers are the British, and the population is Shinalese, which is closer, as Penzig notes, to the physiognomic traits of Europeans. Among all religions, Buddhism is very widespread here, and Penzig noted it.

Society too is different. Here it is more homogeneous, and Western influence is stronger both in female costumes, halfway between western blouses and eastern silk dresses, and in architecture, where Penzig notes the presence of gaudy and rough buildings in western style, mixed with traditional wood and bamboo ones.

Compared to Indonesia, Penzig notes a lesser use of bamboo and palm trees in the countryside as building material, replaced by low-quality masonry and roof tiles or iron sheets. Temples are Buddhist, and Penzig visits them carefully, in some cases with curiosity and on other occasions even with disappointment.

Even here, visits to gardens and museums are due.

The description, dear to Penzig, of costumes of men and women, especially in the countryside, is good information. He notes the habit of girls to wear jewelry, even of great value, and even in everyday life, at work.

There are many excursions, both of botanical nature more demanding, and easy sightseeing tours. For these, Penzig notes with dismay at that time the imperative of advertising signs along the forest roads.

Penzig tells smiling about returning with the colonial dresses lurid and covered by mud and algae from a difficult botanical hike, in the muddy ponds of the Mahaweli River, in search of *Podostemaceae*,. The explorers go parade in front of the astonished native Shinalese who, with the family, on the hot holiday day are on the bank of the river to make a picnic. The children look at them with eyes wide open and ask their parents who they are ever those strange beings with the helmet, so dirty, coming out of the water. Penzig notes: we pretended nothing; we finally managed to find the *Podostemaceae*.

Penzig repeatedly cites high-level and large format photographs purchased or made to realize, which are not attached to the diary.

My research of these photos, promoted by Prof. Mauro Mariotti, Botanist of the University of Genova, and with the help of technician Sandra Placereani, has allowed the discovery of two large boxes of large format photographs framed, annotated and signed by Penzig, in the Archives of the Botanic Garden of Genova.

I digitized these pictures with the help of Emanuele Bruzzone and a digital copy is kept at the University (DISTAV). My research also produced the discovery, in the archives of the former Hanbury Institute, of the manuscript (in single sheets, without the first page) in which Penzig accurately describes, in Italian, the Buitenzorg market, from anthropological, botanical, pomological and product points of view: a precious document of great interest. This description has been included into the printed edition of diary as "Appendix".

Unfortunately, in the most significant points of the handwritten diary, regarding scientific and anthropological descriptions, Penzig overlooks referring to different supplements or the developing documents with best explanations. Such specific supplements, as mentioned above, unfortunately was unavailable.

Penzig's journey ends with the return to Genova with the great German ship Barbarossa, which is on its first return trip from Adelaide (Australia). Penzig uses this ship in the stretch from Colombo (Ceylon) to the Mediterranean.

The manuscript diary, however, is accompanied by several other "documents", pasted or inserted between the pages: travel tickets, payments for materials and services, expense forecasts, notes, etc. Everything was photographed, digitized and attached to the original copy of the diary.

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