Following the “discovery” of America in 1492, Spain (like many other countries) scrambled to claim what they could of the newly found continents. Spain was in its “golden age”, at the time, characterized by exploration into the Americas and the expansion of art scientific research. There were expansions into Architecture, like the Palace of Charles V and the Granada Cathedral. Literature expanded into a multitude of genres like poetry and drama, with writers like Miguel de Cervantes gaining notoriety during this time. The time is also widely considered to be the greatest period of music for the country, as Spanish composers helped shape the renaissance music style. However, the most impactful aspect of Spain during this period were its explorations. Following Columbus, other Spanish explorers captured land in the Americas. Diego Velazquez de Cuellar was one of the first to claim territory for Spain when he setup the first Spanish settlement in Cuba in 1511. The island would serve as both an agricultural producer and a launch point for further explorations into the Americas. Juan Ponce de Leon then claimed what is now Florida for Spain in 1513, and the settlement was finally solidified in 1565. By 1540, Spanish explorers controlled what is now Mexico, Peru, Chile, Columbia, Venezuela, and parts of Paraguay. However, there was a common trend among the explorations that claimed these new lands: Their sole purpose of exploring the “new world.” However, an exploration with a different purpose began in 1570: Francisco Hernandez’s expedition through New Spain, which is considered to be the first expedition in the “new world” with a scientific purpose. The goal of this expedition was to examine herbal medicine in New Spain. Through the lasting legacy of Hernandez’s findings, 1570 exploration through New Spain became one of the most important for the Spanish empire.

Despite the importance of his scientific expedition, Francsico Hernandez had humble beginnings. Hernandez was born in the Province of Toledo, specifically La Puebla de Montalban,

in 1515. This year of birth is contested, as some claim that he was instead born in 1517 based on La Puebla de Montalban's book of marriages and baptisms, but this date has not been confirmed. The only documented reference to his age appears in a letter dated March 20, 1575, which appears to confirm his birth year of 1515. Nothing is known about his family, except that he changed his surname at multiple points in his life: First Fernandez, then Hernando, before finally settling on Hernandez. Although his is known for his scientific endeavors, Hernandez graduated with a bachelor's degree Arts and Philosophy at Complutense University in 1530 prior to his degree in medicine. In 1536 he graduated as a Bachelor of Medicine from the University of Salamanca (another fact that may confirm his 1515 birth year, as he had to be 21 to earn this degree). Interestingly, there is no written record of Hernandez receiving his doctoral degree that has been located, although Hernandez claims to have earned the degree sometime between 1552 and 1554. After this graduation, Hernandez became the doctor to the Duke of Maqueda in the town of Toledo. There he would marry Juana Diaz, with whom he had two children: Juan Hernandez and Maria de Sotomayor. His interest in herbal medicine began in 1555, where he began to study the topic with colleague Juan Fragoso, and between 1556 and 1560 Hernandez was a doctor at the monastery of Guadalupe in Extremadura, where he took charge of the monastery's botanical garden. This role gathered him notoriety, as afterwards he was able to return to Toledo (where he had a house and multiple properties) and practice at the Hospital de la Santa Cruz. During this time, he travelled repeatedly to the court of Madrid, gaining correspondence with the royal family. He also spent this time completing his translation of Pliny's natural history, completing this translation in 1568. This achievement combined with his aforementioned work granted him royal favor, as he fully moved to Madrid and was named chamber physician to King Philip II of Spain. It was in this position that Philip II appointed

Hernandez to be the physician general of the Indies, islands, and mainland, and to create a written natural history of the Indies for a period of five years. This position was not randomly assigned: Hernandez sought out the role of becoming the first to explore the Americas for a scientific purpose, and frequently discusses plans he had drafted for the expedition with Philip II. Philip II granted Hernandez this role, as long as he began his journey in "Nueva Espana" (present day Mexico). Before leaving, Hernandez left his daughter at the convent of San Juan de la Penitencida in Toledo but was joined by his son on his expedition. Unfortunately, Hernandez had been widowed for some time before his departure on his expedition. Finally, Hernandez left the port of Seville with his son and geographer Francisco Dominguez in September 1570.

A portrait of Francisco Hernandez made prior to his departure to the Americas.

Spain had many motivations for approving Hernandez's exploration to the Americas, but many come from the country's king, Philip II. Philip was born May 21st, 1527, died September 13th, 1598, and ruled Spain for 42 years, from 1556 to 1598. Philip traveled significantly prior to

his appointment as king, traveling to Italy, Germany, and the Netherlands from 1543 to 1551. This was due to the teachings of his mother Isabella of Portugal. She had a large influence on him in his childhood, as she taught him Latin, French, Portuguese, and Italian, solidifying his respect for the other nations of the world. She also influenced his love of God and Catholicism. This perception of the world and his duties to his religion motivated his goals to expand the Spanish empire, and during his reign the empire gained its largest extent and influence across the world. Philip II used marriage as a primary means for the spread of his influence and ideals, as he was married four times, with each marriage tying him to another important family in Europe. However, due to his strong feelings of being culturally Spanish, Philip II was often seen as a foreigner in other courts, a feeling that was mutually shared by Philip himself. Philip II was also notorious for his methods of government, famously doing all his work painstakingly on paper alone in his offices. His need for expansion along with his emphasis on written records appears to make him a clear supporter of Hernandez, who gained notoriety for his various written works. This combined with his noted distaste for war likely drew him to support Hernandez's plea for a scientific-focused expedition, unlike the majority of expeditions which focused on conquering territory. This was surprising, as Philip II had a noted mistrust for advisors, a trait pushed upon him by his father Charles V. Overall, considering their many shared traits, Hernandez's drafts for his expedition likely appealed to Philip II's goals as king.

Outside of the goals of the country's king, Spain had many political reasons for supporting Hernandez's expedition. The first comes from the trade market at the time, specifically the drug trade: The Venetians had a firm grasp on the oriental drug trade, which dominated the medicine market at the time. If Hernandez were able to find an American equivalent of these drugs, Spain could upset this monopoly. Gaining a foothold was a goal in

general for the Spanish government- With two unexplored continents primed for exploration, Spain wanted to be the first to discover whatever valuable plants and animals could be found to introduce to the global market. Although the global market was the priority for the Spanish, the local market of the Americas was also an important consideration. Despite the recency of American expansion, disease was already a significant problem effecting Spanish colonies. If Hernandez was able to discover plants that could counteract these diseases, it would significantly assist Spanish expansion throughout the Americas. However, the most important aspect in Philip II's decision to approve this expedition was the lack of a need for further military missions. Since Columbus's "discovery" of America, the Spanish crown focused on strictly military missions to expand their control of the new world. However, these military expenditures quickly became costly to the crown, in terms of soldiers, time, and money. Although this was apparent in earlier military expeditions like the conquest of Cuba, this high cost was most apparent in Hernando Cortez's conquest of the Aztecs. In 1519, Hernando Cortes reached what is now Mexico, with 600 men, 16 horses, and 20 guns. Despite a peaceful initial meeting (as the king of the Aztecs thought he was the god Quetzalcoatl), the relationship between the Aztecs and the Spaniards quickly became violent when the Spaniards captured the king. Despite the powerful weapons of the Spaniards, they were driven out of the city. It took Cortes a year and a half to retake the Aztec capital from its people. This, combined with a second year-long siege involving the Incas at Cuzco led Philip II to likely be reluctant to send further troops to yet another military expedition. However, a scientific expedition seemed promising in every aspect: It would improve the Spanish's understanding of their recently conquered land (offering a defensive advantage), improve knowledge of plants of medicinal value, and potentially create positive relationships with the native population, potentially preventing further violence. Overall, further conflict was

not an appealing move to Philip II. Despite the mistrust of Philip II among his political partners, violence was not an option, and the benefits of scientific research were clear- Hernandez's exploration was supported throughout the Spanish government.

Prior to his departure from Mexico, Hernandez received specific orders from King Philip II on his duties in "Nueva Espana." In these, Philip II ordered Hernandez to meet with native doctors and herbalists in each geographical region he explored throughout the Americas, to gain a general understanding of each region's agricultural specialty. Along with this, he ordered Hernandez to create a written report not only of the animals and plants he encountered, but also the optimal methods to grow these plants in Spain's environment. Finally, although Philip II insisted that Hernandez begin his journey in Mexico (Nueva Espana), he also noted that he wanted Hernandez to thoroughly explore the viceroyalty of Peru. Philip also granted Hernandez geographer Francisco Dominguez to aid him in his journey. Hernandez planned accordingly and devised a route for his expedition that spanned the entirety of Central America, concluding on the Southern coast of Central America. However, Hernandez's most important move in planning his journey throughout the Americas was his acknowledgement of the intelligence of the native population. Hernandez knew his expedition would fail without the knowledge of the native population, so he planned to bring both native guides and illustrators with him. He switched these guides out as he entered different regions to maximize their knowledge of the environment. Without this aspect of his planning for his journey, Hernandez would not have been able to achieve both the success he had on his journey and the extremely accurate illustrations he included in his published works. Ultimately, despite strict guidelines set upon him by Philip II, Hernandez still used his own intuition to create a successful plan for his journey throughout Nueva Espana.

Although the intentions of the Spanish crown were the main outside influence on Francisco Hernandez's journey, there was another important influence: The native tribes of Central America. The most important of those tribes are the Nahua people, a group that Hernandez cites within his surviving texts. They still hold influence in modern times, as they are currently the largest indigenous group in Mexico. The Nahua people is a word used to describe the members of the greater Aztec empire, an empire which spanned the entirety of South America; however, the main regions of its people were the valley of Mexico, Toluca Valley, the eastern Balsas River, Tlaxcala, and Puebla. The tribe also had a presence in surrounding areas, like El Salvador. The people of this empire spoke the "Nahuatl" language. The strength and infrastructure of the tribe protected it significantly during Spanish colonial rule. Due to the crown's need for existing infrastructure to protect its new regions in its new land, the Spanish crown moved its capital cities to match the most populated areas of the Nahua people. This protected the indigenous peoples' regions of power, along with preserving their language, as it became an easier way to Spaniards to spread their ideals across the continent. One of the most impressive aspects of Nahua culture was their understanding of the natural world. The Nahua people had an understanding of medicine, with one of the listed examples of this coming from the bark of the Chinaberry and the root of the Sarsaparilla. These two plants were used by the native people to treat syphilis, a common disease in the "old world." Another important aspect of Nahua intelligence comes from their knowledge of animals. The Nahua people had a deep method of categorization of the animals they knew of in their geographic region, especially concerning the hummingbird, an important animal in their religious culture. However, do the culture's focus on animals in folklore, the Nahua people categorized a large amount of animals, a characteristic that became important when Hernandez called upon the people to assist him in the

development of his texts. The Nahua people also had an understanding of the strengths of the land they lived on. The Nahua people had a deep understanding of horticulture and used a method of farming that utilized fire to prepare fields for the incoming crop rotation. Without careful mathematical understanding and analysis of the land used for farming, this method could have led to damage to the cities they lived on. However, the Nahua perfected this technique, along with utilizing intensive irrigation and terracing to maximize the availability of land for crops. An interesting cultural difference in Nahua horticulture was their use of men- unlike typical traditional gender roles, men were the dominant gender assigned to farming. The Nahual economy was another important factor in the culture, with the size of the towns often reflecting the strength of the economy. The largest towns were often the ones with the most highly developed agriculture, meaning they had the most food available for trade. Creativity was another strength of the culture, with it being reported that the hammock was invented by one of the many Nahua tribes. Overall, despite the common perception that colonial knowledge dominated the Central American continent, the Nahua people and their culture proved to be equal (if not more) intelligent than their Spanish counterparts.

Although Hernandez did not record the exact path of his expedition through Central America, historians have been able to estimate the details of his journey based on works of others written about Hernandez. Joined by his son, geographer, and native associates, it has been assumed that Hernandez split his journey into three separate stages. First, Hernandez went on multiple short expeditions to the borders of Nueva Espana to explore the edges of Spain's land. Second, he explored the center of Mexico, where he stayed for an extended period of time to study the large amount of biodiversity in Mexico's valley. Finally, in the least disputed aspect of Hernandez's journey, Hernandez went on three final trips: First to Oaxaca, second to Michoacan,

and finally to Panuco. Throughout these travels, Hernandez classified plants and animals, along with (although not requested by Philip II) the native languages he encountered on his travels. Hernandez classified three separate dialectics during his journey: One in the center of the Central America (Nahuatl), one in Michoacan in the northwest (Tarasque), and one in Panuco on the eastern coast (Huaxtegue). As Hernandez traveled through Nueva Espana, he gathered different cohorts of native leaders to accompany him on his journey. Despite the colonization of the Central America, Hernandez notes that the native population was still very independent in their knowledge of Central America, and that this nature was important for his writings. In his thesaurus he claims that his work would not have been possible without their assistance. Hernandez was also impressed by the medical knowledge of the various native tribes he encountered on his journey, writing "Medicine is practiced promiscuously by men and women, who call it ticitl." Another important aspect of the journey was conducted in his hometown in Nueva Espana- Mexico City. Both before and in between the stages of his journey, Hernandez met with important Spaniards who had been living in colonized Mexico. He met with individuals who had worked on bringing European medical ideals to the Americas, like Francisco Bravo (a Sevillian doctor, who had published the first medical book printed in America) Alonso Lopez (a surgeon at a hospital in Mexico City), and Augustin Farfan (an author of multiple medical books). However, Hernandez also continued his consistent respect for Native knowledge and also met with individuals like Pedro Lopez, Francisco Toro, and Juan de Unza, who were all Spaniards who specialized in medicine from the native perspective. Hernadez's interviews with these professionals along with his research of medical materials allowed him to supplement the knowledge he gained from his journeys (which mostly was comprised of indigenous knowledge) with knowledge with a more "European focus", a move mostly made to appease Philip II.

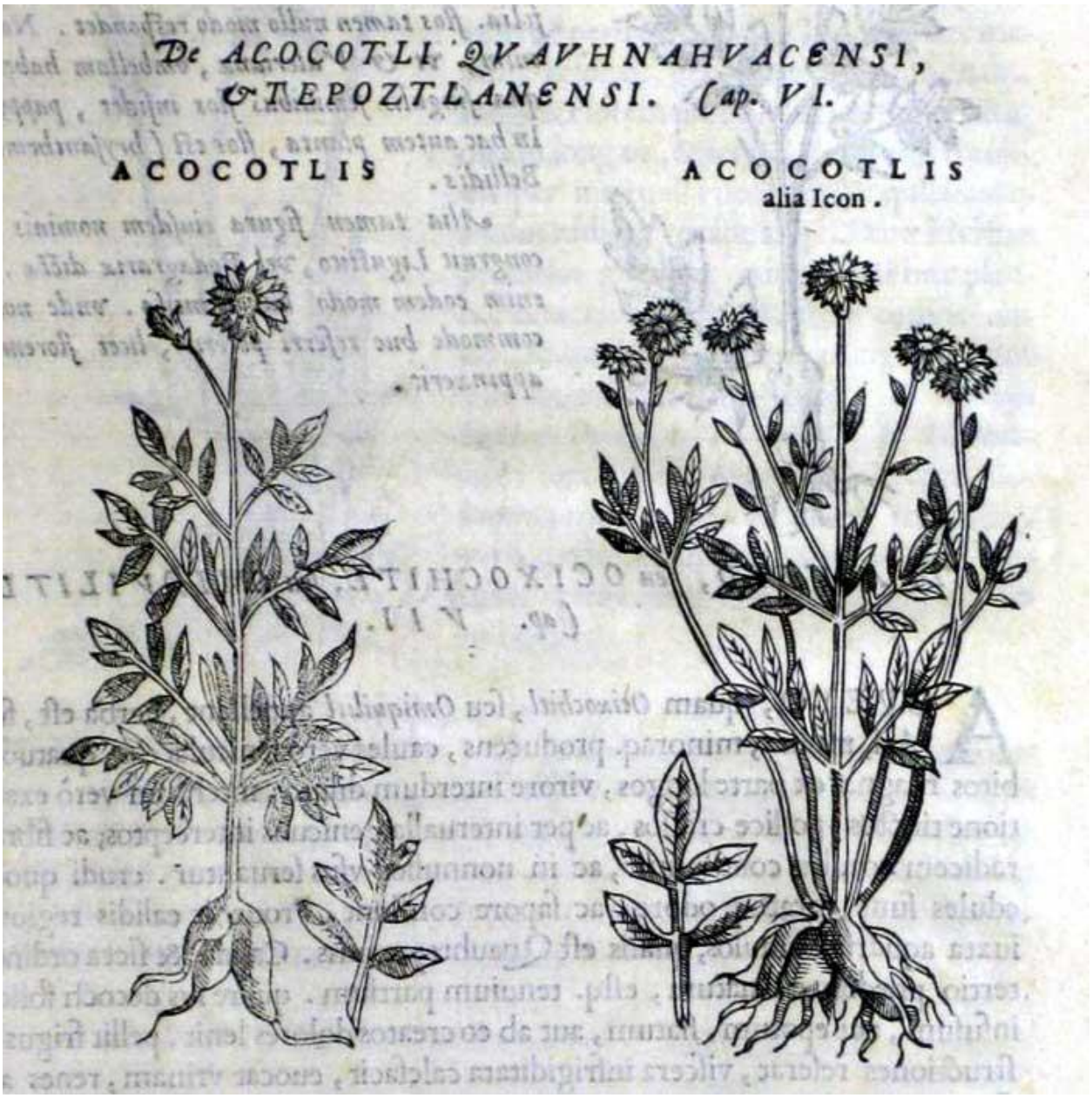
Although Hernandez's journey went over the budget that Philip II had agreed upon in his initial discussion (by the end of Hernandez's expedition, the budget had reached 60,000 ducats) Hernandez's expedition was considered a success. Due to its classification as the first scientific expedition in the Americas, Hernandez made important contributions to our understanding of Central America.

Above is an image of Francisco Hernandez's likely route through Central America. This image includes the different tribes, regions, and languages that Hernandez passed through on his journey. Given the distance of his expedition, it becomes clear that Hernandez's breaks between his journeys were necessary.

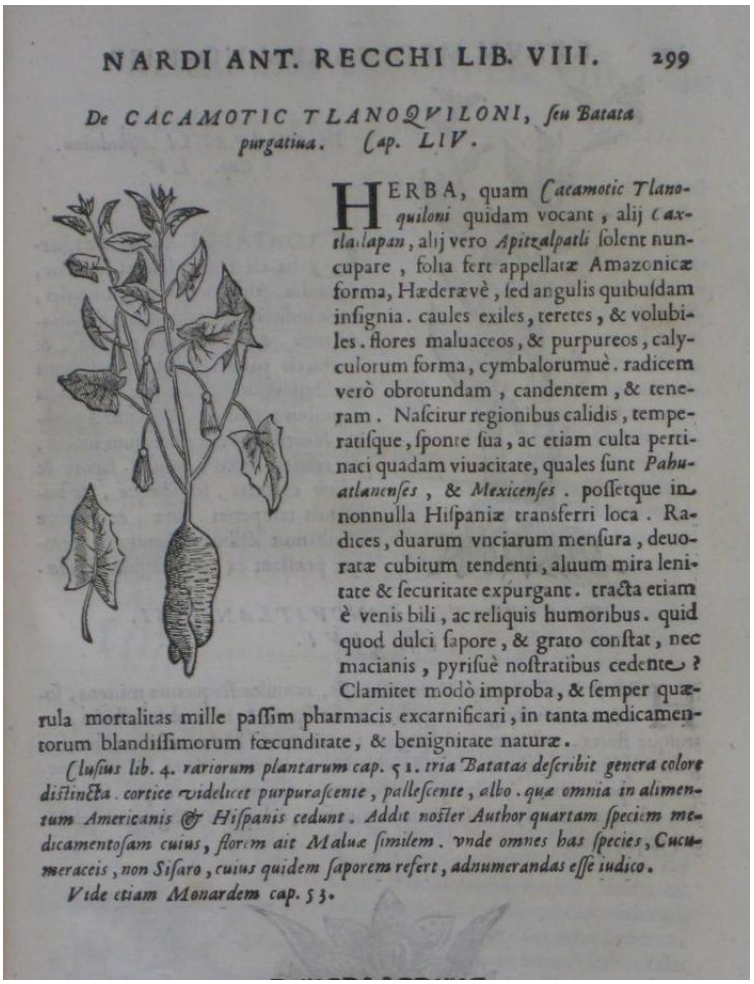
In total, Hernandez's expedition took six years. This was only due to Hernandez's requests, as Hernandez wrote multiple letters to Philip II requesting a larger budget and timeline for his expedition. At the end of these years, Hernandez retired to his home in Mexico City permanently to begin to catalog the findings of his journey. In total, Hernandez's thesaurus was

six volumes, an expensive feat considering that, at the time, paper had to be imported to the Americas. He classified over 3,000 species of plants and animals in his thesaurus. Hernadez's methods of organization were deep and thorough. In terms of the botany of Mexico, Hernandez separated plants into two classes- woody and herbaceous. He then further separated these two classes into edible, medicinal, ornamental, and economic. For each plant, Hernandez would then describe its fruit, color, shape, size, and finally smell (in that order), before discussing the plant's varieties, value, and the environment necessary for its growth. Hernandez gave the most attention to the medicinal subgroup, as he believed they were the most important for the kingdom. One of the most interesting aspects of Hernandez's classification of plants comes again from his respect for native knowledge. When naming plants in his thesaurus, Hernandez opted to use the many plants their Nahuatl name, like the Dahlia, which is now the national flower of Mexico. Due to the fact that many of the plants he studied had no European equivalents, Hernandez had full freedom in selecting names for them. Hernandez was willing to sacrifice for his thesaurus, as he learned these further qualities both from the native guides he employed on his expedition, but also from using himself as a guinea pig. On one occasion, Hernandez records consuming the latex of a plant found in Michoacan, which left him sick for months, sidelining his expedition. A positive example of Hernandez's use of himself comes from his record of cinnamon, which describes as both "slippery" and "sticky." Through this tireless research, Hernandez was able to deliver on Philip II's request of findings that would benefit Spain's position in the worldwide trade sector, as he was the first to give proper, in-depth descriptions to valuable crops such as cacao, chili, corn, tobacco, and tomatoes. Hernandez was especially impressed by corn, claiming the plant could be a viable replacement to wheat. Hernandez also worked tirelessly on his thesaurus's classification of animals, where he was the first to classify animals such the wild pig,

jaguar, armadillo, chameleon, chihuahua, horned toad, and the American bison. However, unlike his research on herbology, a large part of his information and illustrations of animals came from interviews from the indigenous population. Through his thorough first hand accounts and his important conversation with native researchers, Hernandez created a through record of his findings in Nueva Espana.



One of the illustrations from Francisco Hernandez's surviving texts, "Nova Plantarum, Animalium et Mineralium Mexicano Historia." This image depicts a juvenile and adult Dahlia plant. The detail in this image exemplifies the importance of utilizing native knowledge in the illustrations of the plants included in his texts.



NARDI ANT. RECCHI LIB. VIII. 299

De CACAMOTIC TLANOQVILONI, seu Batata purgatiua. Cap. LIV.

HERBA, quam *Cacamotic Tlanoquiloni* quidam vocant, alij *Caxtlailapan*, alij vero *Apitzalpatli* solent nuncupare, folia fert appellatæ Amazonicæ forma, Hæderæ vè, sed angulis quibusdam insignia. caules exiles, teretes, & volubiles. flores maluaceos, & purpureos, calyculorum forma, cymbalorumuè. radicem verò obrotundam, candentem, & teneram. Nascitur regionibus calidis, temperatisque, sponte sua, ac etiam culta pertinaci quadam viuacitate, quales sunt *Pahuatlanenses*, & *Mexicenses*. possetque in nonnulla Hispaniæ transferri loca. Radices, duarum vnciarum mensura, deuoratæ cubitum tendenti, aluum mira lenitate & securitate expurgant. tracta etiam è venis bili, ac reliquis humoribus. quid quod dulci sapore, & grato constat, nec macianis, pyrisuè nostratibus cedente? Clamitet modò improba, & semper quærula mortalitas mille passim pharmacis excarnificari, in tanta medicamentorum blandissimorum fœcunditate, & benignitate naturæ.

Clusius lib. 4. rariorum plantarum cap. 51. tria Batatas describit genera colore distincta. cortice videlicet purpurascente, pallescente, albo. quæ omnia in alimentum Americanis & Hispanis cedunt. Addit noster Author quartam speciem medicamentosam cuius, florem ait Maluæ similem. vnde omnes has species, Cucumeraceis, non Sisaro, cuius quidem saporem refert, adnumerandas esse iudico.

Vide etiam Monardem cap. 53.

Another image from Hernandez's "Nova Plantarum, Animalium et Mineralium Mexicano Historia." This page describes the "Cacamotic Tlanoquiloni" (another example of Hernadez's native naming scheme), which is from the plant family "Convolvulaceae." The plant is a type of yam often confused with the sweet potato.

After two extensions for his work, one in 1575 and one in 1576, Hernandez finally shipped his completed sixteen-volume thesaurus to Philip II in Spain in March of 1576. These extensions were due to both the complexity of his thesaurus, but also possibly due to the fact that Hernandez had fallen ill with what is suspected to be amoebic dysentery in 1572, an illness that slowed his work and would stay with him until his death. Although Hernandez was supposed to depart with his work back to Spain, a sudden outbreak of cocolitztli (typhus exanthematicus) in Mexico City created a sharp increase in death rate, which forced Hernandez to stay for additional time to help care to for the sick. This extra time also allowed Hernandez to write a dissertation on the disease. Finally, in March of 1577, Hernandez departed back to Spain with twenty-two additional volumes of his writing, sixty-eight bags of seeds, and eight barrels and four buckets with medicinal plants from throughout the Central America. Before he arrived back home in Spain, he stopped in Seville, where he planted many of the medicinal plants and seeds brought from Mexico at the Alcazar. When he returned to Madrid, he presented his collected works to Philip II: “The Antiquities of New Spain, his translation of “Natural History”, “The Natural History of New Spain”, “A Treatise on Sixty American Purges”, “Plants of the Canary Islands”, “Plants of Santo Domingo”, and “Plants of Havana” (Although Hernandez had not explored Havana, he claimed to have experienced the benefits of the plants in the Hospitals in Mexico City). After his return, Hernandez was named doctor to Philip III, however this may have simply been an honorary role, as it was reported that Hernandez’s health worsened significantly when he returned from Mexico and was ill until his death in 1587. Hernandez was buried in the parish church of Santa Cruz in Madrid. Unfortunately, his tomb was destroyed by a fire in the church in 1620. Though Hernandez's life ended shortly after his return, the impact of his work endured.

The second title page of "Nova plantarum, animalium et mineralium Mexicanorum historia." Although this illustration was likely done by a Spanish illustrator, the ornate nature of the cover illustrates the importance of quality illustrations within Herandez's texts, along with the Herandez's perceived importance of his texts to the Spanish kingdom.

Although Hernandez's expedition appeared to come to a positive conclusion, this is far from the case. Hernandez was disappointed by the outcome of his expedition through the Americas up until his death, all due to the actions of Philip II. During Hernandez's years abroad in Nueva Espana, Philip II had been hands-off, only acknowledging Hernadez's expedition when it came to extend his research time and budget. However, this mentality shifted once he received the first shipment of Hernadez's texts. Upon receiving the texts, Philip II was unhappy with the use of indigenous knowledge throughout the texts, considering them to be an unreliable resource, and instead of printing copes of Hernandez's texts to be distributed, had bound and buried them within the Escorial Library. Hernandez was deeply insulted by this, and historians believe that this could have contributed to both his early death and his assignment to the care of Philip III (a "punishment" by Philip II). To add insult to this event, Philip II changed his mind on this punishment in 1580 (five years before Hernandez's death) and assigned physician Nardo Recchi to create an edited version of Hernandez's texts, which would finally be published. These were completed in 1582. Hernandez was furious, calling Recchi incompetent, and for good reason- Recchi had deemed that the only important aspect of Hernandez's manuscripts to be the plants of medical importance, therefore cutting years of Hernandez's research out of the printed release. To make matters worse, Hernandez's original texts in the Escorial had been destroyed in a palace fire in 1671, so his original work was completely lost. However, despite these betrayals by his king, Hernandez's work continues to shape our understanding of American botany today. As mentioned prior, the Dalhia flower was named and categorized by Hernandez. Along with this, considering Recchi chose to save these aspects of his manuscripts, Herandez's written records of the medical properties of indigenous flowers of central America form a base for most of medical knowledge of the plants today. Although the science of biodiversity was not created yet in

Hernandez's time, his manuscripts create an important original record of the biodiversity of Central America that is still referred to as of today. Hernandez's manuscripts also create a baseline for how botany manuscripts are categorized and organized. Perhaps most importantly, Hernandez was able to preserve generations of indigenous knowledge in his surviving manuscripts, preventing the loss of knowledge that would have likely never been documented without his respect for indigenous researchers. Finally, his name lives on in the genus Hernandiaceae, a group of flowing plants that grow in the world's tropical regions. Despite his treatment by the kingdom that sent him on his expedition, Hernandez's research and discoveries remained too important to be lost to time, and his research still shapes our knowledge and understanding of botany today.

Although Hernandez's findings are important, there are still criticisms of his work, specifically his treatment of the native population. Historical critics are quick to point out the procedural exploitation of the indigenous population by Spanish immigrants at this time, and Hernandez is not left out of this claim. Historians also point out that the treatment of the indigenous peoples that joined Hernandez on his expeditions may not have been treated ethically. However, I believe that Hernandez's actions show his commitment to respecting indigenous intelligence. This was first shown in his attitude: Hernandez was quick to consult native researchers at any time it was feasible for his research. Hernandez was also quick to reference these native researchers he worked with on his thesaurus, both to those he consulted and to those who contributed illustrations. Without Philip II's interference, we would still have the full list of the contributors. Finally, I believe Hernandez's methods of nomenclature show his respect for the native population. Considering he kept the indigenous names for many of the plants he discovered, he shows he respected their methods of scientific categorization. Although this

period of history is characterized by extreme ethical violations, Hernadez shows that there will still those who respected the intelligence and sovereignty of the indigenous tribes of Central America.

Despite the near 500-year gap between current times and Francisco Hernadez's expedition through Nueva Espana, Herandez's scientific contributions still have a significant lasting impact on our understanding of Central America today. Despite his humble beginnings, Hernadez's role of conducting the first scientific expedition through the Americas is more than just a title: His role in creating the first categorized list of plants and animals contributed to more than just our understanding of Central America, but how researchers approach natural history and categorization Without Hernandez's work, the field of biodiversity would not have garnered the support that it did to lead it to become the respected subject it is today. Not only did Herandez achieve this importance- He did it while the king that sent him on this expedition attempted to remove all signs of his work from the world. He was also one of the few Spaniards to truly acknowledge the indigenous intelligence that supported him throughout his research. Without Francsico Hernandez's years of research, the scientific landscape would be shifted tremendously.

References

Bleichmar, D. (2015). The Imperial Visual Archive: Images, Evidence, and Knowledge in the Early Modern Hispanic World. *Colonial Latin American Review*, *24*(2), 236–266. https://doi.org/10.1080/10609164.2014.972699

Francisco Hernandez in New Spain. Botany at the Edward Worth Library. (n.d.). https://botany.edwardworthlibrary.ie/floras/americas/francisco-hernandez/

Francisco Hernández Expedition (1570–1577). Wikipedia. (2024, October 27). https://en.wikipedia.org/wiki/Francisco_Hern%C3%A1ndez_expedition_(1570%E2%80%93157 7)

Francisco Hernández. Real Academia de la Hisotoria. (n.d.). https://dbe.rah.es/biografias/11654/francisco-hernandez

Hernandez, Francisco . The Theater that was Rome - Biography. (n.d.). https://library.brown.edu/projects/rome/people/0236/

History of Spain. La Moncloa. (n.d.). https://www.lamoncloa.gob.es/lang/en/espana/historyandculture/history/Paginas/index.aspx

Lewis, D. (2002). The Legacy of Francisco Hernández. *Huntington Library Quarterly: Studies in English and American History and Literature*, *65*(3–4), 489–493.

Palmer, S. (2004). Simon Varey, editor The Mexican Treasury: The Writings of Dr. Francisco Hernandez. *Canadian Journal of Latin American and Caribbean Studies*, *29*(57–58), 346.

Philip II. Encyclopædia Britannica. (2024, September 9). https://www.britannica.com/biography/Philip-II-king-of-Spain-and-Portugal

Samir Boumediene. (2020). La americanización imposible: la expedición de Francisco Hernández y los saberes indios. *Nuevo Mundo - Mundos Nuevos*. https://doi.org/10.4000/nuevomundo.79750

The Spanish Golden Age. Wikipedia. (n.d.). https://en.wikipedia.org/wiki/Spanish_Golden_Age

Unger, J. (n.d.). *Spanish Exploration of the 16th Century*. Sutori. https://www.sutori.com/en/story/spanish-exploration-of-the-16th-century--CpXvaBFGEZk4vAYPszaSzEwp

Von Hagen, V. W. (1944). Francisco Hernandez: Naturalist, 1515-1578. *The Scientific Monthly*, *58*(5), 383–385. http://www.jstor.org/stable/18063