An Analysis of Select Swine Feed Ingredients and Pork Products Imported into the US from African Swine Fever Virus (ASFV) Affected Countries

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Key Points:

- Feed and feed ingredients can act as an introduction pathway for African swine fever into the US that needs to be considered
- Analysis focusing on high-risk products from ASF positive countries can help identify entry pathways into the US and assess risk
- The ability to focus in on different products, entry pathways, and country of origin provides flexibility to address a range of questions

The potential for feed ingredients to serve as a vehicle for African swine fever virus (ASFV) introduction to the US remains a significant concern. It is therefore imperative that channels through which high-risk livestock feeds and feed ingredients are imported into the US from ASFV positive countries are identified and considered in the USDA's ASF National Response Framework. Recent events have brought this reality ever closer to US shores, with the confirmed presence of ASFV in the Dominican Republic (DR) in August, 2021. The purpose of this study is to demonstrate the use of a novel analytical tool to categorically quantify pork products and potential high-risk feed ingredients that have entered the US from ASFV-positive countries over a five-year period (2016-2020).

Data for this study were obtained at the United States International Trade Commission Harmonized Tariff Schedule (HTS) website (www.hs.usitc.gov), a publicly available website that provides transaction information on specific trade commodities between the US and its international trading partners. A total of 29 high-risk pork products or feed ingredients with the potential to be fed to pigs were analyzed. High risk products and ingredients were defined as those that previous research has shown to facilitate extended viral survivability, and includes products such as soybean meal and oilcake, distillers grains, pet food, and pork sausage casings. Data were exported into Microsoft Excel and organized into pivot tables to describe the quantity of each product by country of origin and Port of Entry (POE). The analysis focused on the 60 ASFV-positive countries as currently reported by the World Organization for Animal Health (OIE).

In 2020, a total of 486,902 metric tons (MT) of these high-risk products were imported into the US from a total of 19 of the 60 ASFV positive foreign countries. A majority of imported animal feed ingredients came from India in 2020 (85.8%; 392,243 MT), whereas the majority of pork products and by-products were imported from Poland (21,191 MT, 70.6%). Soybean oilcake from India entered the US through a total of 15 ports of entry (POEs) in 2020. Of these POEs, a total of 5 POEs received greater than 91% of all of soy oilcake originating from India, including Baltimore, MD (37.7%), San Francisco, CA (30.1%), Seattle, WA (12.7%), New Orleans, LA (5.9%), and Detroit, MI (5.1%). An additional analysis focusing on the Dominican Republic was conducted, and determined that 634 MT of soybean meal was imported into San Juan, Puerto Rico (USA) from the DR in 2020. When examining trends over a five-year period, a noteworthy finding includes the dramatic rise in soybean oilcake imported from India when compared to China.

To support the risk management of feed imports, the analysis focuses on seaport of highest risk and quantity of product received. Data provided in this report represents an initial listing of suspect pork products and feed ingredients entering the US, much of which is destined for animal feed. Specific detailed examples are provided in order to demonstrate the tool's flexible interface, which can be quickly modified to zero-in on specific feed ingredients, countries, or POEs depending on what the user's question may be. To the authors' knowledge, the use of and application of such a tool has not been previously utilized to support ongoing risk mitigation efforts. Potential outlets for future use of the analytical tool will be to include a more user-friendly and interactive interface providing an inclusive analysis of global livestock feed ingredient sourcing.

The full paper can be found at: https://onlinelibrary.wiley.com/doi/10.1111/tbed.14265