

***Spodoptera frugiperda* (Lepidoptera: Noctuidae) updated host plants and new records**

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The fall armyworm, *Spodoptera frugiperda* (Lepidoptera: Noctuidae) (J.E. Smith, 1797) is the most important noctuid pest in the Americas and the most important pest of corn in Brazil. Recently *S. frugiperda* become an invasive pest in Africa where it is already causing monetary losses estimated to be between US\$2.48 and US\$6.19 billion. A detailed record of *S. frugiperda*'s host plants is essential to better understand the biology and ecology of this pest, conduct future studies, and develop Integrated Pest Management programs. The current records of *S. frugiperda* host plants are fragmented, outdated and published in several different languages. In this study, we collected and systematically arranged the fragmented bibliographic information on *S. frugiperda* feeding records, making it accessible in one single publication and in English language. Furthermore, we registered new records of host plants for *S. frugiperda* based on eight years of surveys in Brazil. The literature review and surveys resulted in a total of 353 *S. frugiperda* larval host plant records belonging to 76 plant families, principally Poaceae (106), Asteraceae (31) and Fabaceae (31). The literature search revealed 274 (77% of total) bibliographic records, while 82 (23%) are new records from surveys in Brazil. The new comprehensive and updated host plant list will improve our understanding of pest biology and management, as well as facilitate future studies on this pest.

Palavras-chave: fall armyworm; invasive species; polyphagia

Apoio institucional: Technological Development (CNPq); Brazilian Agricultural Research Corporation (Embrapa)

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