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Sommario/riassunto	Ergot alkaloids produced by fungi have a basic chemical structure but different chemical moieties at substituent sites resulting in various forms of alkaloids that are distinguishable from one another. Since the ergoline ring structure found in ergot alkaloids is similar to that of biogenic amines (neurotransmitters), a variety of physiological effects can result after ingestion. Research involving ergot alkaloids is an increasing important global issue as more governments pass laws that limit permissible levels of ergot alkaloids in both foodstuffs and feedstuffs. Regardless of whether these compounds are found directly in foodstuffs or in feed/plants given to forage animals (i.e., cattle, sheep, horses, and goats), introduction of these compounds can complicate the food supply. In addition, toxicosis resulting from alkaloids can be a costly hindrance, with mounting annual production losses associated with forage-animal production systems that impact other agricultural and food based industries. Recent advances for the analysis of these compounds in different matrices as well as the understanding the role these compounds play in biological pathways have begun to help address the issue. The proposed Research Topic “Recent Investigations of Ergot Alkaloids Incorporated into Plant and/or

Animal Systems“ will develop a forum where different groups can share recent data where their investigations could include (but are not limited to) how ergot alkaloids: i) influence specific biologic pathways in plant and/or animal systems when introduced, ii) were analyzed in either in biological matrices (e.g. food / feed, blood, urine, etc.), and/or iii) are distributed throughout materials, specifically in plant and/or animal tissues. Each publication must include a description of the methodologies used with the results gained. Inter- and multi-disciplinary approach to this field is desired and would be beneficial in this Research Topic.