Traditional treatment of human and animal salmonelloses in Southern Benin: Knowledge of farmers and traditherapists

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Background: This study aimed to report medicinal plants that are likely to be used in the control of salmonellosis. Animal husbandry is one of the main activities undertaken in developing countries for livelihood. It contributes greatly to the world economy. However, the performances of the livestock sector can be hindered by a number of factors including infectious diseases such as salmonelloses.

Methods: A cross-sectional study was conducted in Southern Benin. Semi-structured questionnaires were administered to 150 farmers and 100 traditional therapists in seven high municipalities. This step helped to collect plants that are used in the treatment of animal salmonellosis and typhoid fever in human.

Results: The results revealed a low level of use of medicinal plants among breeders who prefer antibiotics such as oxytetracycline (53.55%), tylosine + sulfadimerazine (15.30%), and alphaceryl (19.13%). However, plants such as Moringa oleifera (leaves), Carica papaya (leaves and seeds), and Vernonia amygdalina (leaves) were mostly used by some farmers.

From traditional therapists, 57 plant species of 32 families were identified as typhoid fever cures; among which Leguminosae, Asteraceae, and Euphorbiaceae were predominant. Persea americana (22.72%), V. amygdalina (7.57%), and Corchorus olitorius (7.57%) were the most cited by traditherapists for the treatment of typhoid fever in human.

Conclusion: This study provides a database for further studies on the in vitro and in vivo efficacy of Benin plant species on Salmonella spp. These evaluations will guarantee the availability of new therapeutic solutions for populations.