

### 63. 市售雞糞加工肥料成分特性調查分析

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本研究之目的旨在調查市售雞糞加工肥料（品目編號 5-08）之組成分特性，雞糞加工肥料品目規範其需以雞糞為主原料（50%以上），且應有維持攝氏七十度以上至少三十分鐘之製程，成品須製粒且水分低於 20% 以下，大腸桿菌群固態每公克不得超過  $1 \times 10^3$  最確數，且須通過作物毒害試驗。調查目前市售領有肥料登記證之肥料商品計有 30 支品牌，共計 25 家業者申請，進一步檢視各肥料商品之登記成分，全氮、全磷酐、全氧化鉀及有機質含量平均分別為 3.72、3.53、3.06 及 62.8%；另製肥添加之調整材種類主要以菇類培植廢棄包、蓖麻粕及米糠為大宗，少部分業者則使用芝麻粕、花生殼（粉）、稻殼及沸石作為調整資材。調查結果顯示，雞糞加工肥料之氮磷鉀及有機質含量普遍高於禽畜糞堆肥產品，其製程改採乾燥及造粒，不需經堆肥化過程，故可減少氮素之逸散損失。

關鍵語：雞糞、成分特性、製粒

### Investigating the composition characteristics of granulated chicken manure fertilizer on the market

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The aim of this study is to investigate the composition characteristics of granulated chicken manure fertilizer (5-08) on the market. It requires chicken manure as the main raw material (more than 50%), and should be keep above 70°C for at least 30 minutes for sterilization. The finished product must be granulated and the moisture content should be less than 20%. The coliforms count were less than  $1 \times 10^3$  MPN/g, and must pass the crop toxicity test. According to the survey, there are currently 30 brands of fertilizer products on the market, and a total of 25 companies have applied. The total nitrogen, phosphorus, potassium oxide and organic matter content averaged 3.72, 3.53, 3.06 and 62.8%, respectively. In addition, the types of conditioning materials added in fertilizer production mainly include mushroom cultivation waste bags, castor meal and rice bran in bulk, with less some manufacturers use sesame meal, peanut shell (powder), rice husk and zeolite. The survey results show that the nitrogen, phosphorus, potassium and organic matter content of granulated chicken manure fertilizer is generally higher than that of livestock manure compost products. The manufacturing process adopts drying and granulation instead of composting, so the loss of nitrogen can be reduced.

Key Words: Chicken manure, Composition characteristics, Granulated