

10.1071/AN19587_AC

© CSIRO 2020

Supplementary Material: *Animal Production Science*, 2020, **60**(12), 1469–1481

Suitability of litter amendments for the Australian chicken meat industry

S. A. Cockerill^A, P. F. Gerber^B, S. W. Walkden-Brown^B and M. W. Dunlop^{A,C}

^ADepartment of Agriculture and Fisheries, Queensland Government, EcoSciences Precinct, 41 Boggo Road, Dutton Park, Qld 4102, Australia.

^BAnimal Science, School of Environmental and Rural Science, University of New England, Armidale, NSW 2351, Australia.

^CCorresponding author. Email: mark.dunlop@daf.qld.gov.au

Cost comparison scenario

This cost comparison is based on a shed size 150 m long by 15 m wide, with litter depth 5 cm.

Costs of new bedding materials and litter amendments

Table S1. Costs of new bedding materials (Watson and Wiedemann 2019)

| Bedding material | Cost range (\$/m³) |
|-------------------------|--------------------------------------|
| Shavings | 22–38 |
| Sawdust | 18–30 |
| Rice Hulls | 16–25 |
| Straw | 10–15 |
| Recycled pallets | 15–25 |

Table S2. Costs of litter amendments

| Litter amendment | Cost ex GST (AUD, \$/kg or \$/L) | Application rate per grow-out (g/m² or ml/m²) | Cost (per m²) |
|-------------------------------------------------------------------------|-------------------------------------------------|------------------------------------------------------------------------------------|---------------------------------|
| StalosanF (Vilofoss, Denmark) | 4.12 | 100–150 | 0.41–0.62 |
| Sodium bisulfate | 1.20 | 370–730 | 0.44–0.88 |
| Sodium bisulfate (after windrowing) | 1.20 | 570–910 | 0.68–1.09 |
| Alum | 0.60 | 610–1220 | 0.37–0.73 |
| AL+Clear (Chemtrade Logistics, Canada) | 0.62 [#] | 490 | 0.30 |
| AL+Clear Xtra (Chemtrade Logistics, Canada) | 0.83 [#] | 490 | 0.41 |
| Litterlife (Southland Organics, Georgia USA) | 9.43 [#] | 20.4 | 0.19 |
| Klasp (Kemira Water Solutions, USA) | 1.02 [#] | 245–730 | 0.25–0.74 |
| Poultry Guard Litter Treatment (Oil Dri Corporation of America, USA) | NA | 490–615 | NA |

[#]Prices based on US retail costs, NA=not available

Cost comparison charts (\$ per shed per grow-out)

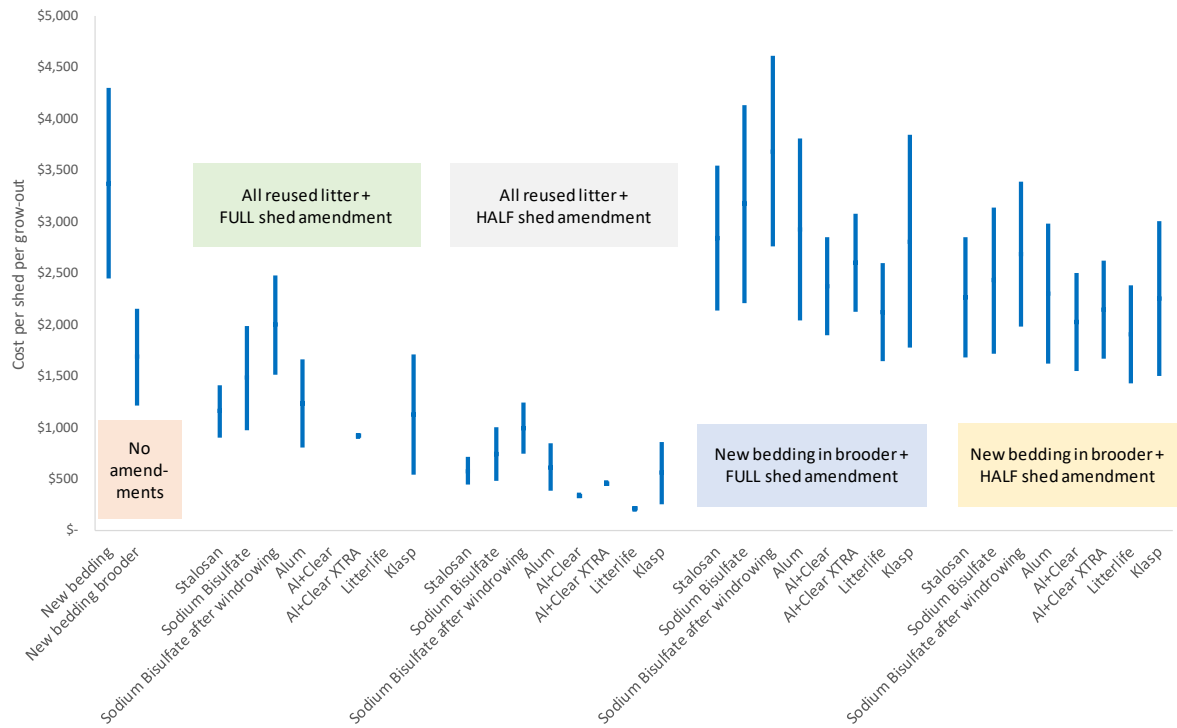


Fig S1. Cost comparison chart for wood shavings

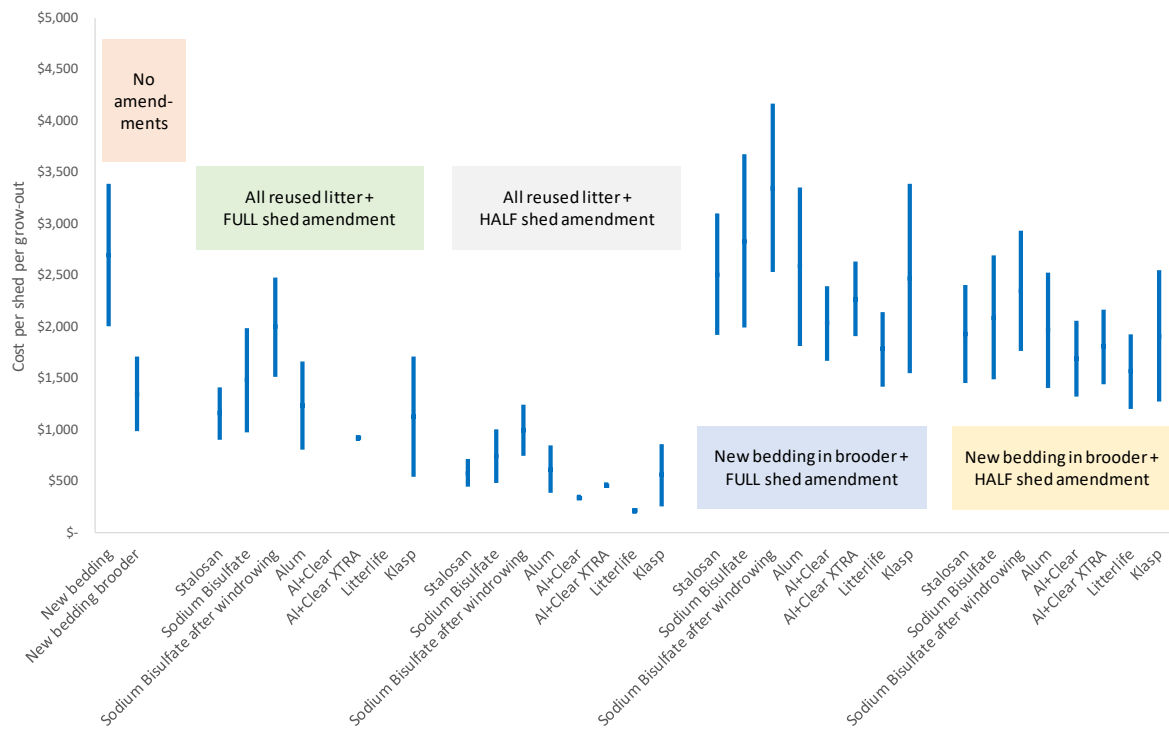


Fig. S2. Cost comparison chart for sawdust

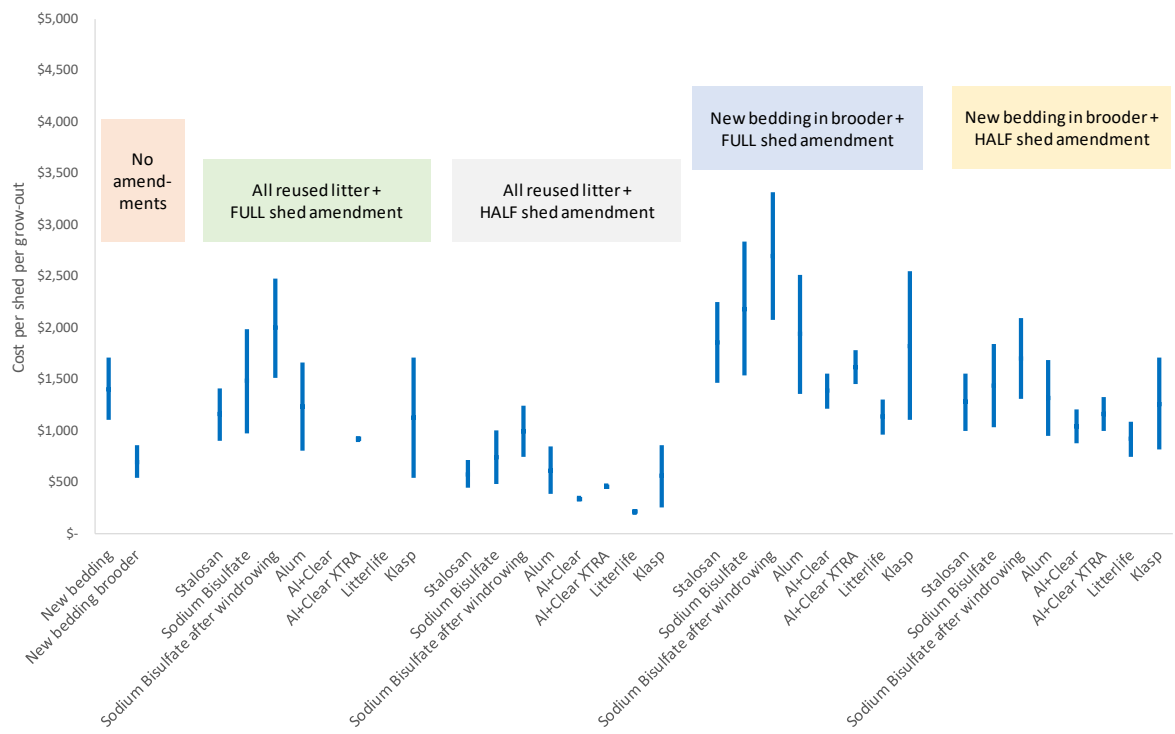


Fig. S3. Cost comparison chart for straw

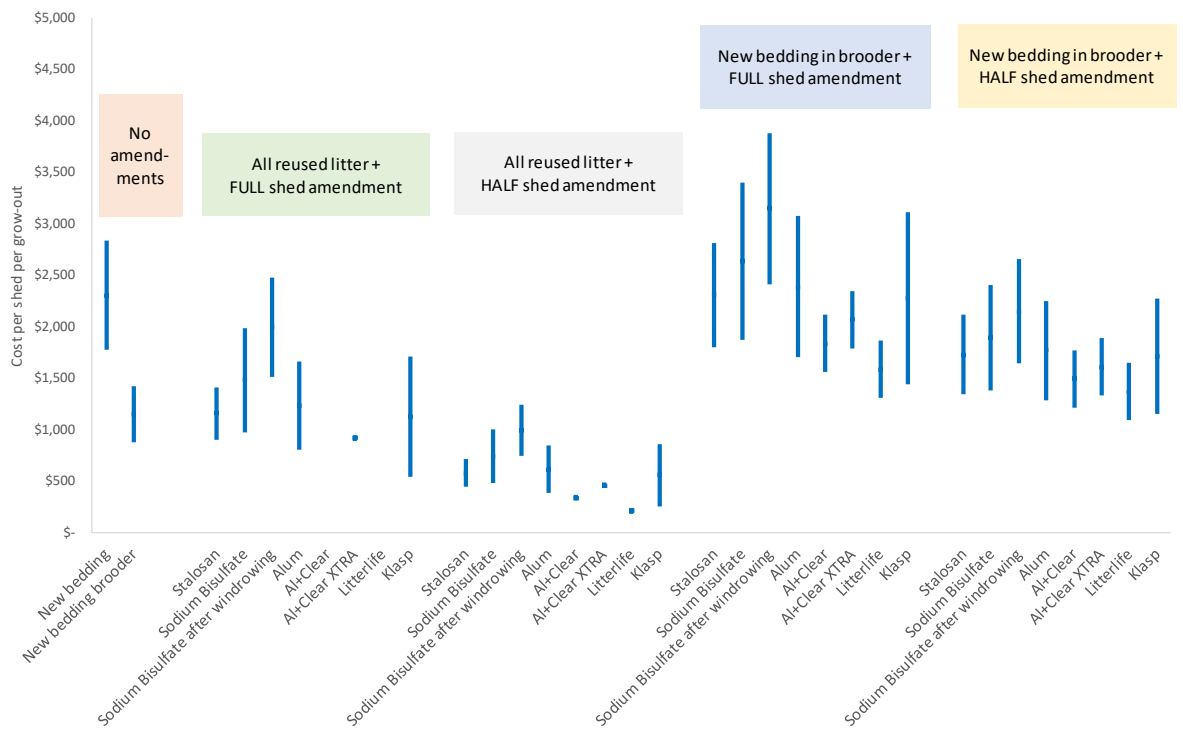


Fig. S4. Cost comparison chart for rice hulls

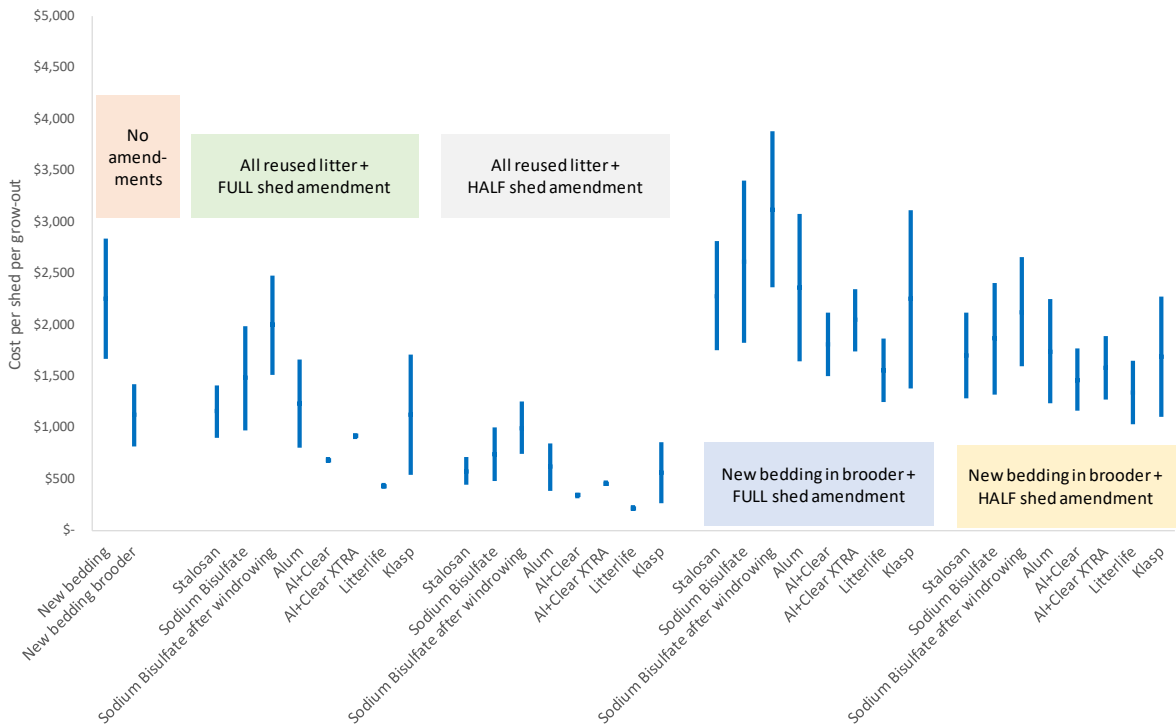


Fig. S5. Cost comparison chart for recycled pallets

Reference

Watson, K, Wiedemann, SG (2019) Review of Fresh Litter Supply, Management and Spent Litter Utilisation. Vol. Project No PRJ-010655 (AgriFutures Australia: Barton, ACT). Available at <https://www.agrifutures.com.au/product/review-of-fresh-litter-supply-management-and-spent-litter-utilisation/> [Accessed 6/8/2019].