

Addressing market and institutional failures in managing invasive species: Insights from bio-mimicry and adaptive governance*

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This paper discusses institutional changes that may facilitate an adaptive approach to biosecurity policy-making where governance is viewed as a multi-disciplinary, interactive experiment acknowledging uncertainty. Using the principles of adaptive governance, evolved from institutional theory, we explore how the concepts of lateral information flows and incentive alignment might shape Australia's invasive species defence mechanisms. In doing so, we draw from immune system structure to suggest design principles for biosecurity policy emphasising overlapping complementary response capabilities. These criteria are then used to discuss novel policies that might enhance the resilience and adaptability of the system to pest and disease incursions.

Key Words: Biosecurity, pest and weed management.

* The authors would like to thank Steve Hatfield-Dodd for helpful comments on the manuscript.

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