AgPest – a decision support tool for New Zealand’s pastoral industry

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AgPest is a website (www.agpest.co.nz) that provides relevant, up-to-date and independent information on the identification and control of pastoral pests and weeds to support New Zealand farmers and rural professionals with decision making around pest and weed management. In addition, AgPest provides timely advice that will reduce the need for ‘fire-fighting’ decisions, late treatment and, sometimes, pesticide use. The ultimate goal is to reduce the economic impact of pastoral weed control (estimated impact = NZ$ 1.2 billion p.a.) and invertebrate pests (estimated impact = $4.1 billion p.a.) through more targeted management, thereby increasing pasture persistence and productivity. Since its launch in 2011, AgResearch scientists have added over 100 entries (70 weeds and 32 pests), each with information on the weed or pest biology, management and impact. An identification tool and pictures assist users to rapidly and accurately identify weeds and pests. In collaboration with Beef + Lamb New Zealand, alerts on weeds and pests are disseminated through various social media channels. This provides farmers with timely information that enables a rapid response, which is often critical to minimise the impact of weeds and pests. Key features of AgPest will be displayed.

Porina flight activity and larval distribution in pastures on the West Coast of the South Island

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Porina (Wiseana spp. Viette (Lepidoptera: Hepialidae)), regularly damage pastures on the South Island’s West Coast but local information useful for mitigation strategies is lacking. Flight activity of porina moths was monitored on 11 farms in the region using light traps over three summers from 2014–2017. Pastures on the same farms were sampled during winter (2015–17) to collect porina larvae. Porina moth flights typically began in October and continued through into March with peak flight activity from early December to mid-January. Wiseana copularis comprised >85% of moths captured. Wiseana umbraculata was caught regularly, representing about 10% of total catch. Observed flight patterns indicated that diflubenzuron for larval control should be applied from late February to early or mid-March for maximum impact on porina populations but exact timing should be driven by local not regional flights. Wiseana copularis was the most common species collected in pastures (265 of 267 larvae collected). One W. jocosae larva was found in 2015 and one W. umbraculata larva in 2016. No W. cervinata adults or larvae were identified. This suggests the species primarily responsible for damaging these pastures is W. copularis.