

Fig. S2: Meiotic chromosome pairing behaviour in established *Brassica napus* cultivar “Drakkar” and in putatively stable and unstable resynthesized *B. napus* lines (2023-24). Letters indicate significant differences between lines for each of bivalent, univalent and multivalent frequencies (Kruskal-Wallis test followed by Dunn’s post hoc test,  $p < 0.05$ ).

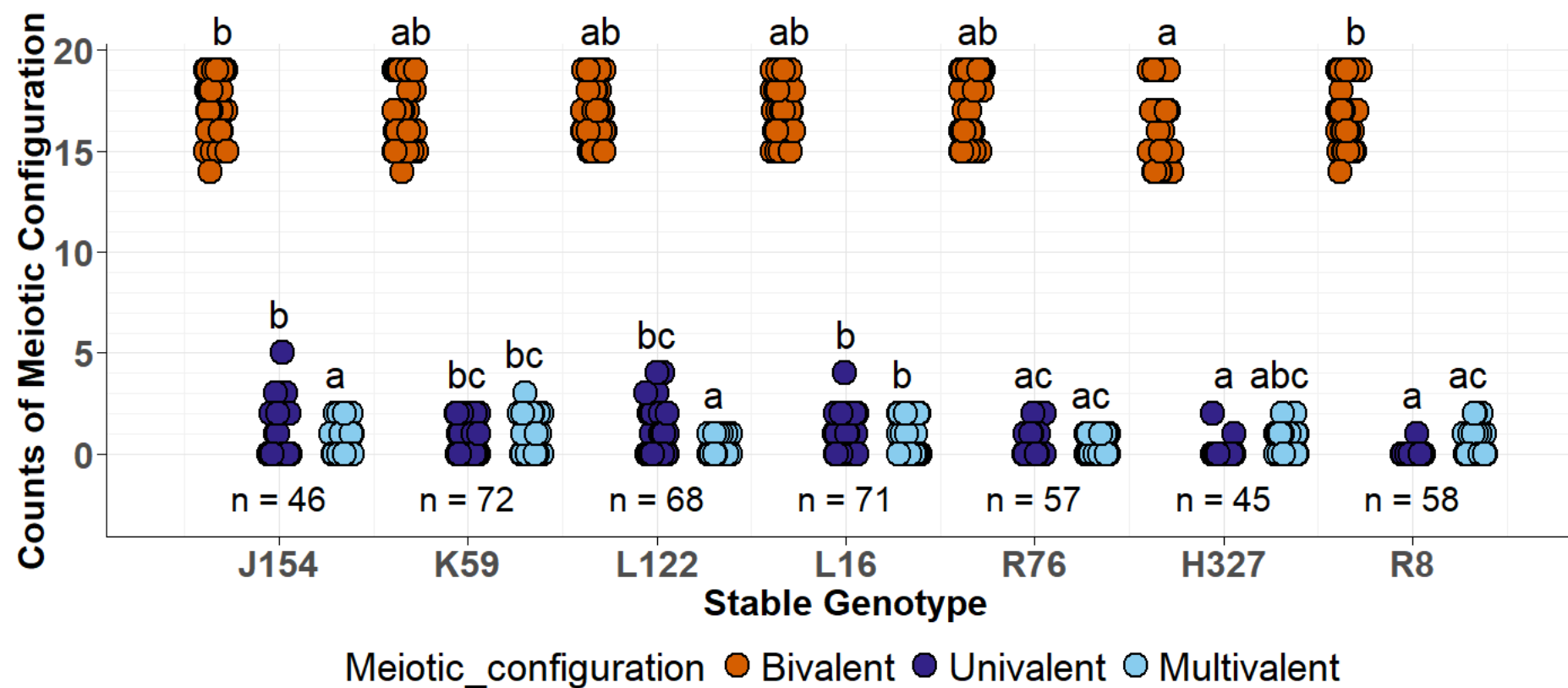


Fig. S3: Meiotic chromosome pairing behaviour in putatively stable resynthesized *B. napus* lines (2022-23). Letters indicate significant differences between lines for each of bivalent, univalent and multivalent frequencies (Kruskal-Wallis test followed by Dunn's post hoc test,  $p < 0.05$ ).

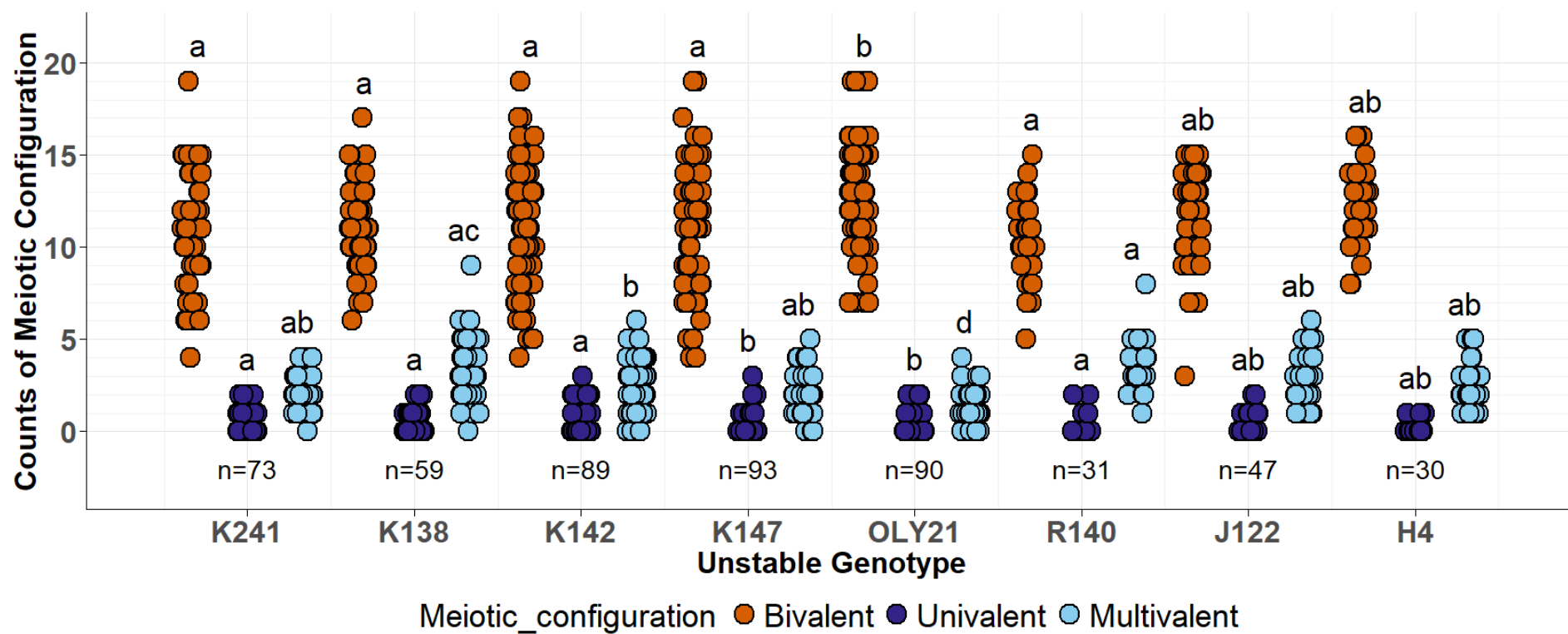


Fig. S4: Meiotic chromosome pairing behaviour in putatively unstable resynthesized *B. napus* lines (2022-23). Letters indicate significant differences between lines for each of bivalent, univalent and multivalent frequencies (Kruskal-Wallis test followed by Dunn's post hoc test,  $p < 0.05$ ).

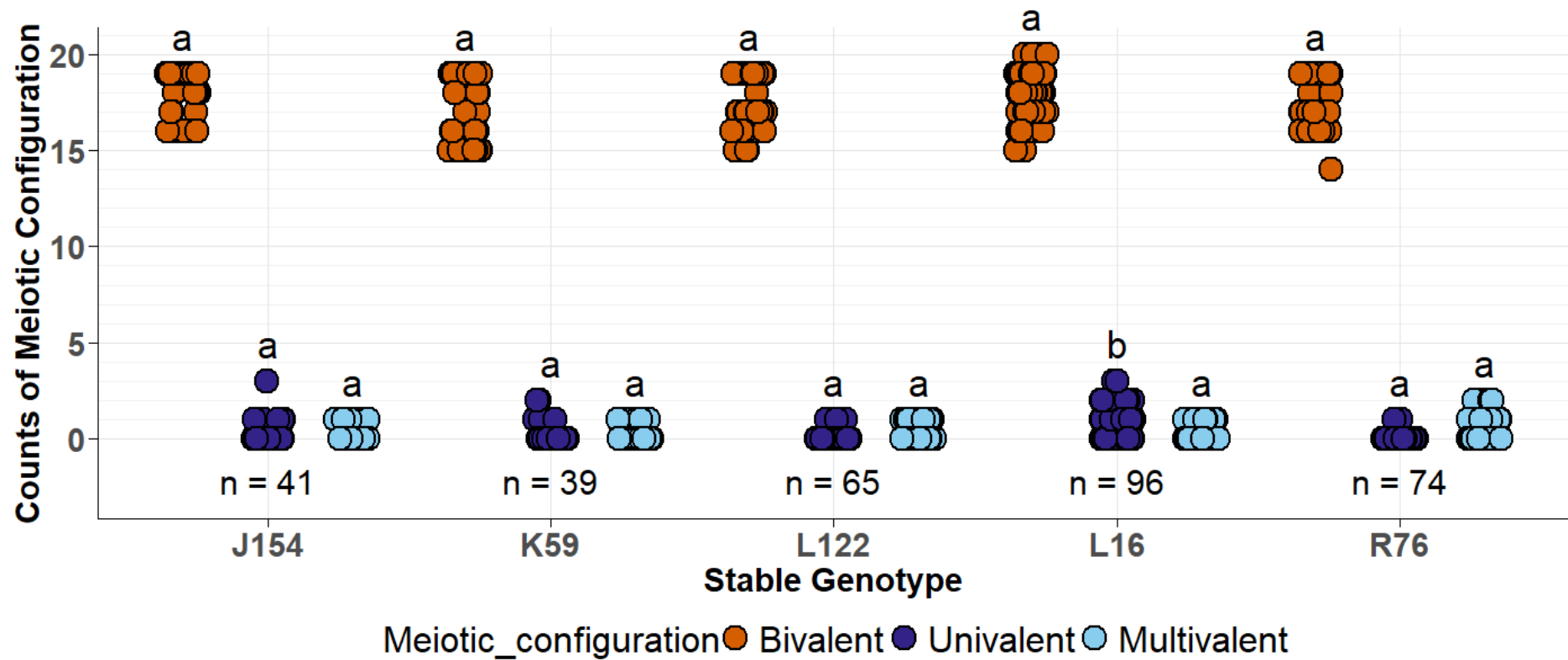


Fig. S5: Meiotic chromosome pairing behaviour in putatively stable resynthesized *B. napus* lines (2023-24). Letters indicate significant differences between lines for each of bivalent, univalent and multivalent frequencies (Kruskal-Wallis test followed by Dunn's post hoc test,  $p < 0.05$ ).

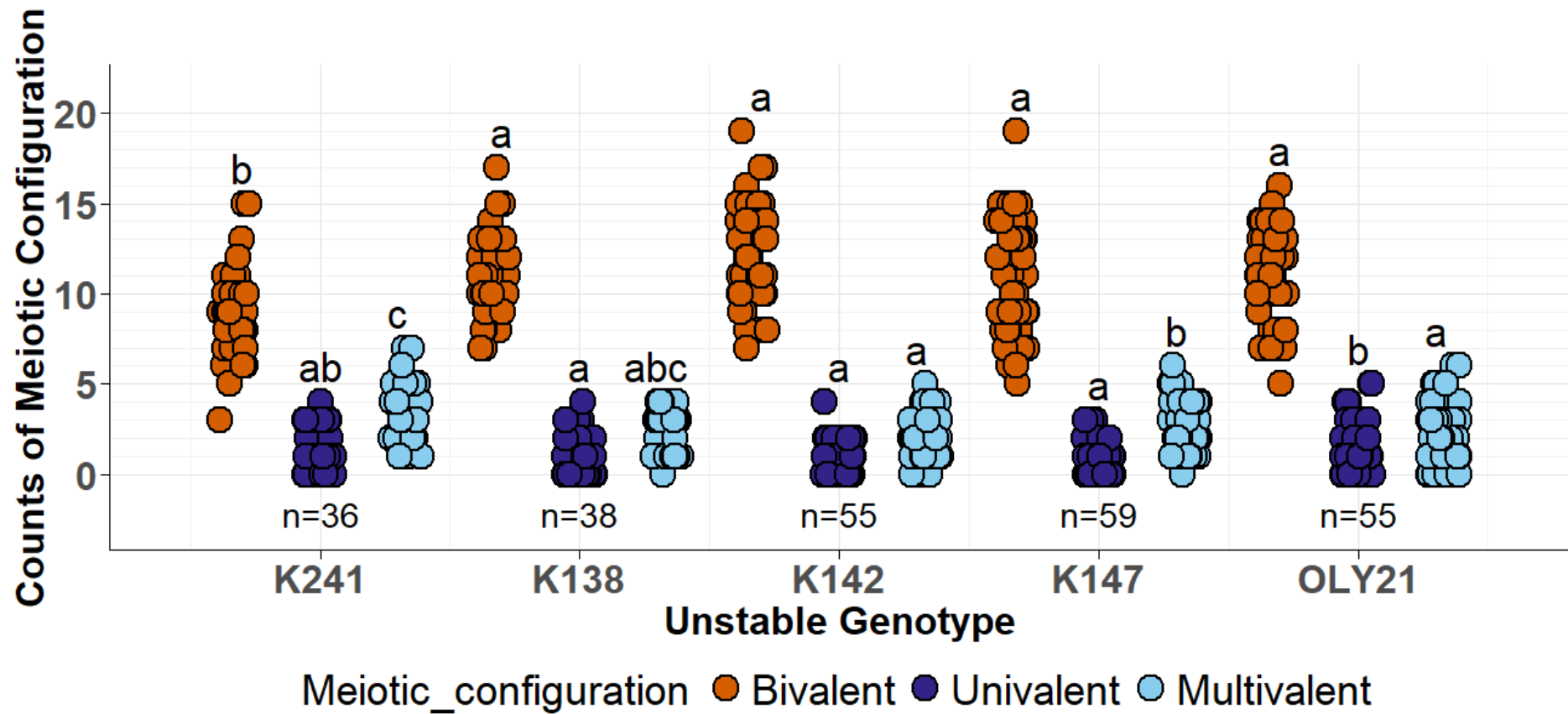


Fig. S6: Meiotic chromosome pairing behaviour in putatively unstable resynthesized *B. napus* lines (2023-24). Letters indicate significant differences between lines for each of bivalent, univalent and multivalent frequencies (Kruskal-Wallis test followed by Dunn's post hoc test,  $p < 0.05$ ).

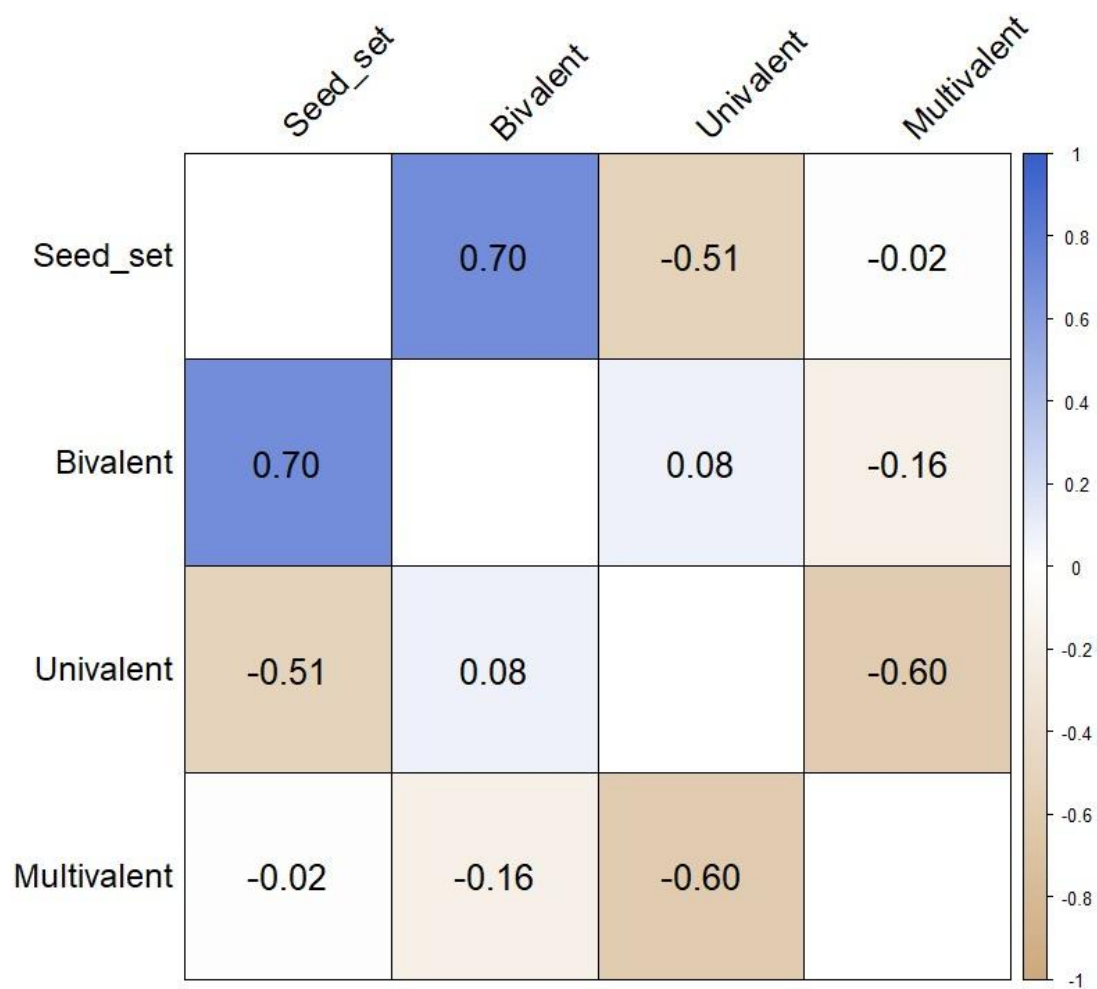


Fig. S7: Correlation between different meiotic configuration and seed fertility in putatively stable resynthesized *B. napus* (Pearson correlation,  $P < 0.05$ ).

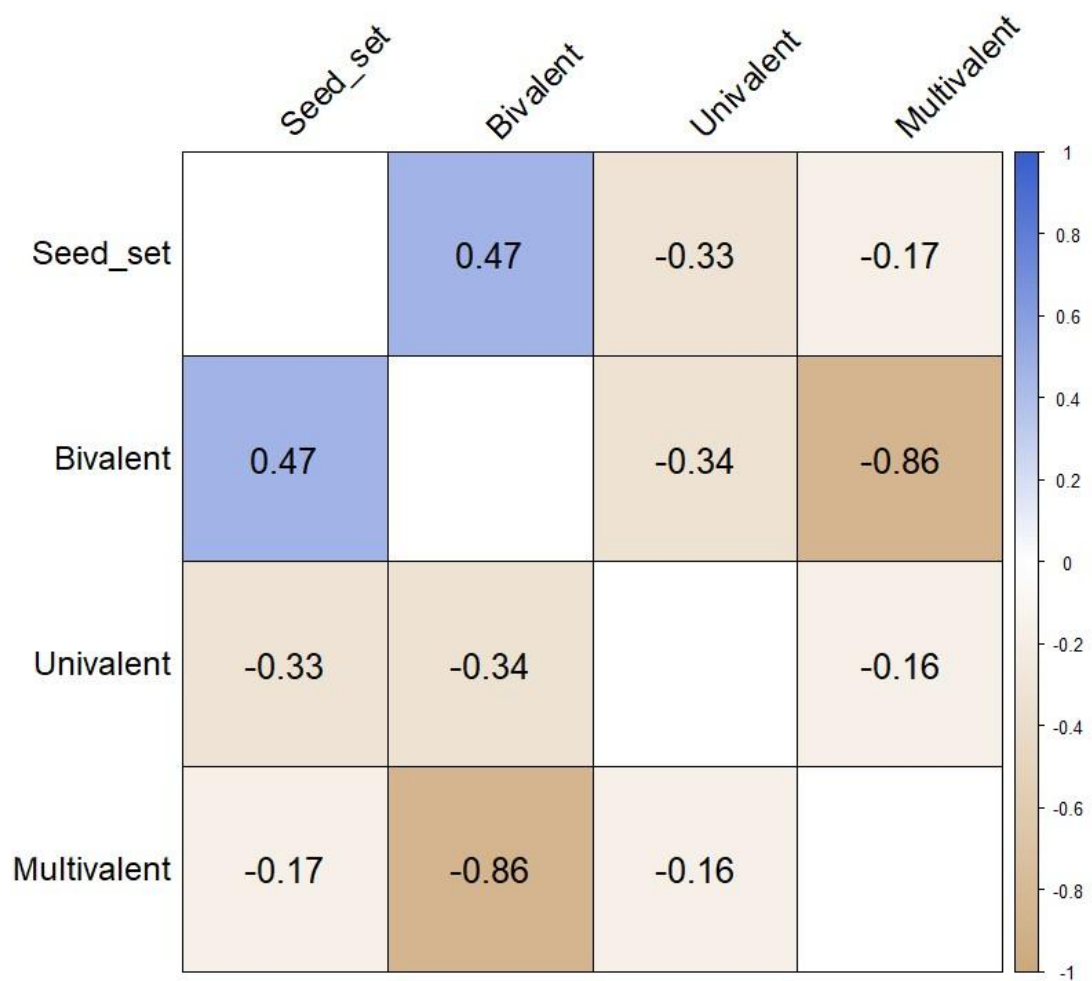


Fig. S8: Correlation between different meiotic configuration and seed fertility in putatively unstable resynthesized *B. napus* (Pearson correlation,  $P < 0.05$ ).