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*Ramsey-minimal graphs for star-forests.* (In English)

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Let  $G$  and  $H$  denote two given graphs. A graph  $F$  is  $(G,H)$ -minimal if whenever each edge of  $F$  is coloured red or blue the red subgraph contains a copy of  $G$  or the blue subgraph contains a copy of  $H$  and, furthermore, no proper subgraph of  $F$  has this property. The pair  $(G,H)$  is Ramsey-finite or Ramsey-infinite according as there are a finite or infinite number of  $(G,H)$ -minimal graphs. The authors partially solve the problem of classifying the star-forests (i.e. forests of stars)  $G$  and  $H$  for which  $(G, H)$  is Ramsey-finite. They show, among other things, that if  $G$  and  $H$  are star-forests with no single-edge components, then  $(G,H)$  is Ramsey-finite if and only if both  $G$  and  $H$  are single stars with an odd number of edges.

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Classification:

05C55 Generalized Ramsey theory

05C05 Trees

05C35 Extremal problems (graph theory)

Keywords:

edge colouring; generalized Ramsey number; Ramsey-minimal graphs; star-forests