

研究短论

适合钉螺、血吸虫生长发育的气候条件变化

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摘要 根据有关研究成果,分别取日平均气温5.87℃和15.17℃为钉螺和日本血吸虫生长的下限温度,取3846.28 d·℃和842.95 d·℃为其有效积温指标。以1986年为分界点,利用1950-2003年气象台站日平均气温资料,计算了80%保证率下,5 d滑动平均气温稳定通过5.87℃和15.17℃的起始日和结束日以及历年有效积温,借助ArcGIS 8.3模块分析了钉螺和血吸虫生长发育季节气候条件的变化。结果表明:气候变化使大部分地区钉螺和血吸虫生长发育季节延长,生长发育速度加快。气候变化可能使钉螺感染季节延长,感染率增高。

关键词 [气候变化](#) [钉螺](#) [血吸虫](#)

分类号

A Change of Climate Conditions for Growth of Oncomelania and Schistosoma

Abstract According to related studies, mean daily temperatures of 5.87℃ and 15.17℃, and effective accumulated temperatures of 3846.28 d·℃ and 842.95 d·℃ were taken in this paper as the low limit temperature index and effective accumulated temperature index for growth of Oncomelania (snail) and Schistosoma, respectively. Considering 1986 a division and using daily mean temperature data during 1950-2003, the changes of start and end days when five-day moving average temperature steadily passed 5.87℃ and 15.17℃ under the 80 percent guaranty rate, and the effective accumulated temperatures for the growth of Oncomelania and Schistosoma were computed year by year for each of 220 meteorological stations in the region of 18°-41°N, 99°-124°E, respectively. The variations of their growing period and effective accumulated temperature before and after 1986 were analyzed by means of ArcGIS8.3. The results suggest that the climate change in 1950-2003 has possibly increased the density of snail and prolonged the schistosomiasis infecti on period.

Key words [climate change](#) [Oncomelania](#) [Schistosoma](#)

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