Rex+

2024, Quasar (@ Hex Discord)

Rex is misère Hex (**R**everse H**ex**). Rex+ is where players can place one or more friendly stones (as many as he likes).

Rules:

1. Black places one or more stones on the board
2. White decides to swap sides or not
3. On their turn, Black and White take turns placing one or more stones on the board
4. The players that connect their two sides lose the game

Some discussions/quotes from the Discord server:

- [@Quasar] @A.Tortoise and I played some 4x4 Rex+ today and it was great fun. Like Hex, the rules are extremely simple and unambiguous, but it seems to be much more complex than Hex even on tiny boards like 4x4. (Here by "complex", I mean that I don't understand anything.)
- [@Mason] unintuitively, the following argument doesn't hold: 1) hex is a monotone game; 2) therefore, adding one of your stones to a position is never worse for you; 3) therefore, adding one of your stones to a position in rex is never better for you
- [@Quasar] The point is, if it's your turn, you prefer to play in the dead cell so that the opponent will have to play in the live one and lose. It would be to your disadvantage if the dead cell already contained one of your stones, because then you would have to play in the live cell and lose.
- [@Mason] Some examples (o/vertical; x/horizontal):

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x x o o x          x x o o x          x x . . x
 x x o x x          x x o x x          x x o x x
  x o o x x          x . . x x          x . . x x
   x o x x x          x o x x x          x o x x x
    . . x x x          . . x x x          . . x x x


rex: x wins        rex: x wins        rex: x wins
rex+: x wins       rex+: 2nd player wins   rex+: o wins
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