

7.2 SARAN

Model ini masih dapat dikembangkan lagi mengingat masih terdapat penyebab lain yang dapat dipertimbangkan seperti pencarian jumlah manusia yang sudah terkena tapi belum teridentifikasi sebagai penderita demam berdarah, adanya pemberian vaksin demam berdarah dan lain-lain.

Dalam memprediksi jumlah penderita maupun nyamuk sebagai *vektor* dapat diselesaikan secara numerik. Metode analisis Homotopi multistage (MAHM) dapat menjadi alternatif metode untuk menyelesaikan model SIR tersebut.

Buku referensi ini diharapkan dapat menjadi salah satu rujukan pada bidang matematika dan kesehatan.

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TENTANG PENULIS



Dr. Syafruddin Side, S.Si., M.Si. Lahir pada tanggal 2 Februari 1972 di Paladang kabupaten Pinrang. Pendidikan Sekolah Dasar diselesaikan di SDN 165 Paladang pada tahun 1985. Selanjutnya, pendidikan SMP (1988) dan SMA (1991) di selesaikan di kabupaten Pinrang.

Tahun 1991, Ia melanjutkan studi di jurusan Matematika Universitas Hasanuddin dan menjadi wisudawan terbaik jurusan Matematika periode September 1996. Sejak bulan Februari 1997 diangkat menjadi staf pengajar pada Jurusan Matematika Universitas Negeri Makassar sampai sekarang. Ia melanjutkan studi di program megister jurusan Matematika Institut Teknologi Bandung pada tahun 2000 dan menyelesaikan studinya pada bulan Juni tahun 2003, kemudian pada tahun 2009, Ia melanjutkan studinya di jurusan Matematika Fakultas Sains dan Teknologi Universiti Kebangsaan Malaysia dan meraih gelar Doktor pada tahun 2013. Selain mengajar di FMIPA Universitas Negeri Makassar, Ia juga menjadi dosen luar biasa di Fakultas Tarbiyah Institut Agama Islam Negeri Alauddin Makassar sejak tahun 2003 dan di Universitas Sulawesi Barat sejak tahun 2010. Selain itu, Ia juga aktif mempublikasikan hasil-hasil penelitian pada jurnal internasional bereputasi seperti *Journal of Mathematical and Fundamental Sciences*, *International Journal of Simulation*

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Buku pertama yang dibuat oleh Syafruddin Side adalah Topologi yang diterbitkan oleh Universitas Negeri Makassar pada tahun 2006, buku kedua juga diterbitkan oleh Universitas Negeri Makassar pada tahun 2013, sedangkan buku hasil penelitian yang berjudul solusi numerik pemodelan matematika SIR dan SEIR untuk penularan demam berdarah dengan metode semi analitik ini merupakan buku ketiga setelah buku Topologi (2008), Sistem Dinamik (2013).



Dr. Yulita Molliq Rangkuti, S.Si., M.Sc. Lahir pada tanggal 22 January 1976 di Lubuk Pakam. Pendidikan Sekolah Dasar diselesaikan di SDN 060929 Medan pada tahun 1988. Selanjutnya Pendidikan SMP Negeri 2 (1991) dan SMA Negeri 13 (1994) di selesaikan di Medan.

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Buku ini merupakan buku pertama yang dibuat oleh Yulita Molliq Rangkuti yang merupakan hasil penelitian fundamental yang berjudul solusi numerik pemodelan matematika SIR dan SEIR untuk penularan demam berdarah dengan metode semi analitik.