

SUPPLEMENTARY TABLE S1. Vectors, hosts, geographic distributions, and collection years of emerging mosquito-associated viruses in China (2010–2020).

| Virus | Vector | Vertebrate host | Distribution (year) |
|-------|-------------------------------|-----------------|---|
| ZIKV | <i>Armigeres subalbatus</i> | Human | Guizhou (2016) (1) |
| | <i>Culex quinquefasciatus</i> | | Yunnan (2016) (2) |
| | <i>Cx. tritaeniorhynchus</i> | | Jiangxi (2018) (3) |
| TMUV | <i>Anopheles sinensis</i> | | Anhui (2013) (4) Beijing (2010) (5) Chongqing (2013) (6) Fujian (2010) (7) Guangdong (2011–2015) (8) Guangxi (2011) (9) Hebei (2010) (5) Henan (2010) (9) Hubei (2018) (8) Inner Mongolia (2017) (4) Jiangsu (2010, 2012) (5,9) Jiangxi (2010) (5) Shandong (2010, 2011, 2012, 2016) (4–5,9–10) Shanghai (2010) (11) Zhejiang (2010–2016) (10,12) Yunnan (2012) (13) Sichuan (2013) (6) Taiwan (2019) (14) Shanxi (2007) (15) Beijing (2014) (16) Gansu (2011) (17) |
| | <i>Cx. pipiens</i> | | Jilin (1997) (18) |
| | <i>Cx. tritaeniorhynchus</i> | | Liaoning (2012) (19) |
| | <i>Cx. annulus</i> | | Qinghai (2007) (20) |
| | <i>Ae. flavidorsalis</i> | | Xinjiang (2005, 2006–2008, 2011) (21–23) |
| | <i>Ae. caspius</i> | | Jilin (2017, 2018) (24) |
| | <i>Cx. pipiens</i> | | Inner Mongolia (2018) (25–26) |
| | <i>Cx. modestus</i> | | Hubei (2010) (27) |
| | <i>Ae. dorsalis</i> | | Shanxi (2012) (28) |
| | <i>Ae. vexans</i> | | Gansu (2006) (29) |
| LNV | <i>Ae. vexans</i> | Mice | Shandong (2017) (30) Henan (2011) (31) |
| | <i>Cx. tritaeniorhynchus</i> | | Anhui (2017) (GenBank, unpublished data) |
| | <i>Ar. subalbatus</i> | | Hebei (2002) (29) |
| | <i>Cx. pseudovishnui</i> | | Sichuan (2012, 2018) (32–33) |
| | <i>Cx. fuscocephala</i> | | Shanghai (2005) (29) |
| | <i>Cx. annulus</i> | | Guizhou (2008) (34) |
| | <i>An. sinensis</i> | | Hunan (2017) (35) |
| | <i>Cx. pipiens</i> | | Yunnan (2005, 2007, 2010, 2012) (29,34) |
| | | | Guangdong (2018) (36, 37) |
| | | | Hainan (1964, 2018) (38) |
| GETV | <i>Ae. vexans</i> | | Taiwan (2002) (39) |
| | <i>Cx. pipiens</i> | | Liaoning (2006) (40) |
| | <i>Cx. tritaeniorhynchus</i> | | |
| | <i>Ar. subalbatus</i> | | |
| | <i>Cx. pseudovishnui</i> | | |
| | <i>Cx. fuscocephala</i> | | |
| | <i>Cx. annulus</i> | | |
| | <i>An. sinensis</i> | | |
| | <i>Cx. pipiens</i> | | |
| CHAOV | <i>Ae. vexans</i> | | Liaoning (2008) (41) Inner Mongolia (2018) (25) |
| | <i>Cx. pipiens</i> | | |
| AeFV | <i>Ae. albopictus</i> | | Hubei (2018) (25) Shanghai (2016) (42) Yunnan (2018) (43) Liaoning (2011) (44) Shandong (2009, 2012, 2018) (25,45) |
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| CxFV | <i>Cx. pipiens</i> | | Henan (2004) (45) Shaanxi (2012) (45) Shanxi (2012) (46) |
| | <i>Cx. tritaeniorhynchus</i> | | Shanghai (2016, 2018) (25,42) |
| | <i>An. sinensis</i> | | Hubei (2018) (25) |
| | <i>Cx. modestus</i> | | Inner Mongolia (2018) (25) |
| | | | Gansu (2011) (17) |
| | | | Taiwan (2010) (47) |
| | | | Xinjiang (2012) (48) |

TABLE S1. (Continued)

| Virus | Vector | Vertebrate host | Distribution (year) |
|-------|------------------------------|-----------------|-------------------------------|
| QBV | <i>Cx. tritaeniorhynchus</i> | | Shanghai (2016, 2018) (25,42) |
| | <i>Cx. pipiens</i> | | Shandong (2018) (25) |
| | <i>An. sinensis</i> | | Inner Mongolia (2018) (25) |
| | | | Hubei (2018) (25) |
| | | | Hainan (2018) (25) |

Abbreviations: AeFV=Aedes flavivirus; CHAOV=Chaoyang virus; CxFV=Culex flavivirus; GETV=Getah virus; LNV=Liao ning virus; QBV=Quang Binh flavivirus; TMUV=Tembusu virus; ZIKV=Zika virus.

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